Folk

Berthou, William. Travels ... (1791) p. 469, "It is chiefly the sweet small acorns of the Quercus phillos [willow oak], Quercus aquatica [miga, water oak], Quercus semprevirens [Q. virginiana, live oak], Quercus phainomela [ ? ], and others, which induce these birds to migrate in the autumn to those Southern regions."

Coale, Henry K. On the nesting of Ecoloptics migrating. Ark 39 (1922) 259-5, "From Charles Douglas, Washtegan, Okt. In the spring the birds fed on wild raspberries, and in the summer came into the garden and ate the cherries."

Clinton, De Witt. N.Y. Nat. Hist. Prog. 5, 2 (1823) 210-5. "Favorite food is beechnut, "at also subsists on the acorn, cherries, wild cherry, seeds of the red maple, and some weeds, poke, and other seeds of berry, buckwheat, and the principal cereals."

Adamsen, B. F. Wild pigeons poisoned. N.Y. Tribune. April 16, 1878, p. 5. "Letter. East Seguin, Mon. April 10, 1878. Pigeons nesting in immense numbers in northern Michigan. They are attracted thither by the root swamps of the Rhododendron or abies abal, commonly known as the poison laurel. . . . The smelled wild unter has swelled and developed the buds prematurely, and the pigeons are feeding upon them. This diet impregnates their flesh with a subtle poison, and numerous dangers and fatal cases are being daily reported from eating them. None should be eaten until after the reported furnishing them. None should be eaten until after the heating. . . ." [The only Michigan species is Kalmia polifolia, it is very probable that the birds were not eaten].

Thoreau, Journal, Vol. 12, p. 324. Sept. 13, 1859. "The great red oak acorns have not fallen. It is a wonder how pigeons can swallow acorns whole, but they do."

Vol. 13, p. 103. Jan. 23, 1860. "Winnett says that pigeons alight in great flocks on the tops of hemlocks in March, and he thinks they * K. angustifolia much less common
Trapping

Martin, E. T. What became of all the pigeons? Cluting 64 (1919) 480.
"The worker saw me a lot of 1,528 sold for 50c. nice, clean
lively birds. They were caught at a single throw of a large
double net, in the nest, so far as he knew, taken at one
time during the nesting. Says 500 day could not be handled
by the netter in one day. P. 481. A hundred million pigeons
shipped alive would fill 1,390,000 crates; dead, 1,000,000
barrels. (Supposed to be 300 to 400 to bbl.)"

"They came in flocks and the men put up long fish
nets on poles, just the same as in the water, and caught
the pigeons in that way."

Deerfield I netting combined with spear shooting.

Dodge, E. S. Notes from Six Nations ... J. Washington Acad. Sci.
35 (1945) 392. Cayugas took squabs only. "Adults were never
taken and the white man's method I netting was never used."

Douglas, William. A summary, historical and political ... Boston Vol. II. (1755) p. 218 "... (they are caught alive in nets
or amures ...); cunning seed or its oil, are found by experience
the best lure to induce the pigeons to their nets;"

Hinde, H. Y. Narrative of the Canadian Red River ... expeditions ... Vol. 1
(1860). A St. James Church, near Fort Harry, June 15, 1858.
In a wheat field were several pigeon traps, consisting of nets
20 x 15' stretched on a frame supported by a post on one side.
String attached to trap was pulled. Some or more entrapped at me
fall. "Near the net some dead teas are placed for the pigeons to
perch on, and sometimes stuffed birds are used as decoys to
attract the passing flocks."
"Tapping

Faint, W. Memorable days in America: ... (1823) 248.

Re fall events in Tennessee [Kentucky?], extending over
within a portion of woodland or barren.

But the grand

mode of taking them is by setting fire to the high dead grass,
leaves and shrubs underneath, in a wide blazing circle,

ried at different parts, at the same time, so as soon
to meet. They soon rush the pigeons in immense numbers,
and incredible confusion, to be wasted alive, and gatlied
up dead next day from heaps two feet deep.

M. "Nesting pigeons. E & S. 19 (April 22, 1880) 231. Good description
of setting pigeons on a salt lick at Shelby, Mich.

Mackay, George H. Old notes on the p. pigeons. Aug. 28 (1911) 261-3.
From notebook F. Further Adams, Townsend, Mass. In fall of

1847 he took 5,028 pigeons, almost all in September. In 1848
he took 1,926, almost continuously from May 1 - Sept 11.
[According to my calculations, better figure should be 1,962].

Moore, J. B. History of the Town of Candia, Rockingham County, N.H.
(1893) p. 280. Varied flocks until 1840, in spring. A considerable
number of the farmers from the earliest days, after the
settlement of the town were in the habit of catching large numbers
of pigeons with nets for their own use or for sale in the
large towns and cities.


Here are about 12,00 professional Trappers. p. 47. The
live birds are placed in cages 12 square holding 500 birds
(at twelve). The first day they are placed in the cage 30 to 50
will die, the next day 5 or 6, and thereafter the losses are
very small."
The net was sprung just as some of the incoming pigeons were touching the ground and others almost touching, for then the birds could not turn quickly enough to escape the net. If the pigeons were allowed to settle before the net was sprung, they might see it and fly quickly from under it; ... it was quite a trick to spring the net at the right instant to get the most birds.

Corn was successfully used at the nets to back the early arrivals when snow was on the ground; but when the snow was gone, they would not come to it, for they preferred seeds, nuts and other wild food.

The best netting was to be had at about six miles from the pigeon city, because that was the distance at which the pigeons tended to stop and feed. Nets set near the city never worked half as large as those if netting worked farther down the valleys.

Anon. The great pigeon roost. N.Y. World July 4, 1874, p.3.

Re trapping in salt beds at the roosting near Frankfort, Renzie Co., Mich. in 1874: "The biggest catch of the year has been 800 birds, though it is recorded that one trapper secured nearly 1,300 at one strike. This probably would have been exceeded by Mr. Fisher a few days ago when he struck into a flight so thick that the birds raised nets, staked, and all, breaking the meshes and flying off by hundreds. Some idea of the extent of the operations may be formed when it is said that probably a thousand bushes each of salt and corn have been used in preparing the seed beds this season."


24 (Sept., 1910) 20-4.
Trapping

Oct. 28, 1933. Pigeon meeting 1878. He and two others
made a bed at a salt spring on the south side of Crooked
River. On this much me put sugar, oil of coloea and oil of
rock. After they found this much and salt it was hard to
keep them away. Best catching was in the morning with
the male birds. Used double nets each 8 x 50. Dead birds,
"all fried," were placed on the bed. Also had a still pigeon.
The first day we caught over a wagon load. "We caught
as many as 110 dozen [1320] with one strike of the nets. We
c caught between 50,000 and 60,000 [500,000 and 720,000] on
that one bed." Nov. 4, 1933. At the height of the meeting
there were 700 pigeoners operating.

Tom Trunk, A pigeon roost. Red 4 then 8 (June 3, 1876) 149.
Shelby, Mich. meeting 1876. The largest catch 3 heard of
by one man, or in one place, were 154 dozen in one day,
and 140 dozen [1680] at one spring. A double net on
a salt bed. Nests of twenty-five to fifty dozen were
often made on salt beds. Where birds get tasted, and
sometimes they come down on a bed so thick they will
stand on one another. The busiest catching was done on
the flight, where these birds would come down to stock
on almost any place large enough to set a net. I was
speaking with one red pigeon that had followed the
business for twenty-one years, and his opinion was that
the birds were rapidly decreasing, but that there was enough
for all practical purposes yet; and we would think so to
see a good day's flight at this roost."
Trapping

Pheasants, then wild pigeons... Chautauquan 22 (1896) 209.

'Trappers learned that birds while nesting were frantic for salt. In April 1876, he was invited to witness netting on a salt-bed near Petersk. "I think I am correct in saying the birds piled one upon another at least two feet deep when the net was sprung, and it seemed to me that most of them escaped the trap, but on killing and counting, there were found to be over one hundred dozen, all nesting birds."

The Boston Evening Transcript Sept 9, 1884: "A man in Chelmsford took eighty dozen (960) at one spring of his net, last evening [9th]."

"As, in rising from the bed, pigeons always fly in the direction of the stands, the net is set so as to intercept them. ... The pigeons came early, and lighted on the stands, sometimes they would sit on a hour before going down to the bed. At first one would go down, then two or three more, immediately afterward, nearly the whole flock would pour down.

The net was then sprung by pulling the rope."

"Many more caught with horrors! ... The horror was tied down in the middle of the bed, with string enough to let him out freely. When a flock passed over, wishing to join them, he would flutter, and call them. Although there was
Trapping.
no bait, they would thus be cheyked. As they would
not light unless there was bait, the catcher was ready
to spring the net upon the flock the moment it struck
down where the heron's was.

The pigeons are caught on water beds as well as feeding
grounds. A water bed is made by filling an excavation
with water. ... Some salt is used. ... The water of the Canadian
river is alkaline and did not draw well. Caught most
on gravel beds as they would settle down for stones.
Canadian would appear to be too far from nesting.
I once saw 67 dozen caught at one cast if the net
but 30 or 40 ... is an average big catch.

Kalm, Peter, A Disc. 1744. ... C. 28 (1914) 67. The
savages in Chenango 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
they ate off the saltly earth soil. The savages pulled the cords,
evicting them in the net, and this at once secured
their entire flock.

Dodge, E.S. Notes from the Six Nations ... J. Wash. Acad.
Sci. 35 (1948) 343. A Cayuga stated that the white man's
method of netting was newer. needs,
Trawling

Thompson, W. W. "The P. S. Pigeon [1921] A. Dr. E. Osborn, Saratoga, N.Y. built a pen 100 x 20 x 5' high, bailed it for several days using as high as 40 bushels of corn at a time, used several nets to spray over top. Caught 3,000 at one time.

Braunler, W. "The present status of the wild pigeons ... Auck 6 (1889) 288-9. Information from B. Stevens, Cadillac. "Usually about one third are too quick for the net and fly out before it falls. Two hounds are kept on the wood and the dog bed. The former is the most killing in Michigan, but, for some unknown reason, it will not attract birds in Wisconsin. It is made of mud, kept in a moat condition and saturated with a mixture of saltpetre and animal feed. ... When they are feeding on beef, meat, they often will not touch grain of any kind, and the meat must then be used for bait. ... The usual method of killing pigeons is to break their necks with a small pair of pliers, the ends of which are bent so that they do not quite meet. Great care must be taken not to shock the bird in the neck, for the pigeons notice this at once and [289] are much alarmed by it. Young birds can be netted in wheat stubble in the autumn, but this is seldom attempted. When just able to fly, however, they are caught in enormous numbers near the 'meetings' in pens made of slats. A few dozen old pigeons are confined in the pens as decoys, and a net is thrown over the mouth of the pen when a sufficient number of birds have entered it. Mr. Stevens has taken over four hundred dozen young pigeons to be taken at once by this method.
Trapping

[Baldwin, W.H.]: 1,320 pigeons caught in day, Dec. 20, 1924.

"The hubbub of cries made was 110 dozens one day at an unwaterable, and got a dollar for them. That was a good price. I sold them as cheap as 25 cents a dozen."

After net was opened the quickest way to kill them was by hitting the heads. Then I'd jerk out the long tail feathers, hoot the end, and poke it through the bill. I tied up the birds in bunches for a dozen each.


"Mr. Ayres in Calendonia, used to catch them in a net by the time hundreds at a time. He sold them for from 25 to 10 cents a dozen. He used to take a great number, put them in a cage and fed them with salted wheat, boiled. After a month the birds became light-colored and much improved, commanding double price."

Ginther, E.C. The passenger pigeon in Wis. (1910) Wis.

"I shot pigeons. They never failed to bring down a flock that was passing by, even after they had passed by you more than a half mile. You could see them begin to sail around, and come back and light down.

Every feature was removed from the bed after a catch, as otherwise the pigeons would not alight."
Trapping.


"Alexander had used to till ... haying some older boys and young men ... set up a 'pigeon killer' on the high bank of the river [Red] ... They planted a long hickory pole in the ground and attached cords to it extending in opposite directions. At this point the birds generally flew low, and as they passed over the bluff the boys would vibrate the pole rapidly by pulling the cords alternately, the tops of the pole snapping hundreds of them to the earth."

"Smith of the city, about where Lakeside is now, Capt. James Earles and his brother, Lawrence, had a pigeon pole of a different character. They had an old seine about one hundred feet long, which they would shuttle between two trees, as high as they could manage to adjust it. The small cords of the seine were invisible to the pigeons in their rapid flight. When they struck, the seine would fall to the ground and others become entangled in its meshes. Then the boys would drop the net to the ground and capture the birds thus imprisoned. Many killed with garden rakes, pitchforks, etc., as they skirmished over the ground."

Andrews, Vol. 1 (1831) 326. "I knew a man in Pennsylvania, who caught and killed upwards of 500 doves in a clap-net in one day, averaging sometimes twenty doves or more at a single haul."


Bait. "Two tablespoonsful of meal with the same amount of molasses mixed over half a bucket of grain are directions given me by Mr. Kent of North Brookfield, Mass., a successful pigeoneer."
Trapping

Emman, E. R. Passenger pigeons ... description of catching three now extinct birds. Clinton (Wis.) Banner June 14, 21, 1923. Description and detailed drawings.

Moore, John. Columbarium: or the pigeon house. London (1735) p. 15. "The Cummin Seed, which has a strong smell in which pigeons delight, will keep your own pigeons at home, and allure others that are straying about, and at a loss where to fix upon a habitation."

Lone, Charles. Netting wild pigeons a lost art. Norand Them 4 (1931) 224-5. Muncy, Pa. He last used a net in 1871. He caught 500 birds in one spring of the net was made near sundown, the pigeons being very tired. The others followed, piling upon the nest floor until it was three deep with pigeons. The birds at top seemed to be standing on their heads in their efforts to reach the grain.

Schroeder, Unpublished manuscripts. J Cotter, Master... Arch 55 (1938) 473. A friend told him that the pigeons entered his barn and by clearing the door he entrapped "in less than Two Hundred Pigeons."

Wood pigeons are caught in nets by old women who bite their necks.


Utilization.

French, p. 31. William French. "The farmers brought their logs to the grounds and built log pens to keep them in, feeding them upon the young birds, as they turned them loose each morning [32] to gather up whatever could be found. Whole families came with barrels and salt; the young birds, from ten ounces to twenty ounces weight, were dressed, salted and packed in barrels and carried away to markets and for storing until needed."

p. 45. William French & John Krimes. Susquehanna meeting 1805 (?).

"... they had seen; that millions of the fat squabes had been melted down for their fat alone; that many barrels of the oil went down the river in boat-loads."

p. 48. Flesh of squabes delicious.

French, p. 184. Henry W. Shearer. "Jonathan Carman ... relates that in the fall of 1778 in Ohio he stopped one night with an aged couple who resided in a great hickory wood. ... gave him something 'extra fine' for supper. ... accompanied the same to the attic, where m cere was hung hundreds and hundreds of gilded wild pigeons' breasts."

French, p. 286. Charles H. Elder. "A family living on the headwaters of Rock Run, which empties into Wyoming Creek at Ralston, Pa., made a barrel of soap fat from squabes, so plentiful were they in that section."

Wintemberg, V. J. "Then prehistoric village site, Oxford County, Ontario. Nat. Mus. Canada Bull. 51 (1928). 5. The most abundant bird bones were passenger pigeons."

French, p. 194. "Women would be hired to pick them, taking the feathers for use in making feather beds."
Charlevoix, t. p. 25... Means have been found of catching
many of them alive; they are fed till the first setting
in & the first, then killed and thrown into the store-room
where they are preserved all the winter." - at Montreal.


Pigeons trapped at Newfane, Mass. "They sell from one
dollar and fifty cents to two shillings per dozen,
and the feathers sell for enough more to pay all expenses."

(1745) p. 415. Among game the traders have plenty of
"pigeons," but only in winter "for they return northward
with the wind."

137-8. "As a food, these pigeons were a great blessing to
the early settlers. Through several winters my mother
served "spiced pigeons" to her guests as a choice dish.
In the cellar were some 2 stone jars packed solid
with birds pickled in spiced apple cider and sealed
with airtight covers. The minister never had to eat
woodchuck at our house."

at head of Delaware R. in N.Y. in 1837. Squabs were drawn
and could live on hard-corn meal. Called "jinking."
To make the
harvest I squat & carry a large, the squabs went about thumping
the trunks of the trees with heavy lengths of hickory, using
them as battering rams. This would hatch the squabs.
the flesh from their nests like ripe chestnuts."

Crevecoeur (1782) p. 38. "I have frequently seen them at the
market so cheap, that for a penny you might have as many
as you could carry away. Excellent food in spite of their
"extreme cheapness."
Utilization

Brickell, Dr. John. The natural History of North Carolina. Dublin (1757) 186-7. "The Blood helps disorders in the eye, the Coats of the Stomach in Powder, Cures bloody fluxes. The Rupee is the hottest of all Poisons, and is wonderful attractive, yet accompanied with an Anodyne force, and helps the Head-ache, Woe, pain in the Side and Stomach, Pleurisy, Cholick, Apoplexy, Asthmy, and many other disorders."

Coppes, Susan Farnam. Journal of a naturalist... Vol. I (1856) 13. "The Rupees: They are not thought very healthy foods, however, when eaten repeatedly in succession. There is a tradition that the Indians, at the time & the year when they lived chiefly in these hides, were not in a healthy condition."

Cunningham, W. W. Wild pigeons flights thin and now. F. 1855, 52 (March 20, 1899) 226. "I never considered them a desirable article for food; not much better than a yellow hamster."

Burnaby, Rev. Andrew. Travels through the Middle Settlements in North Am. in years 1769 and 1770. (1793), 101. "I met with scarcely any other food at the ordinaries where I put up; and during their flights, the common people subsist almost wholly upon them. At least flight at Newport, R. I., Sept. 4, 1769."

Martin, Edward F. What became of all the pigeons? Nature 64 (1914) p. 481. "The old pigeons were never considered a delicacy. Taken when nesting they were about as palatable as a setting hen. The young were fairly good for table use and squeak... ready to leave meat, nice & fat, but hard to get."

Rex, Charles. The P. pigeon. J. Can. Soc. Nat. Hist. 21 (1910) 53. "As a food the old ones were not very good, being rather
Dry and tough things well flavored, but the younger ones were excellent.

1. Boiled with wild rice, also with potatoes and meat.
2. Cooked in hot ashes without cleaning or removing the feathers.
3. The feathers were removed and the birds cooked by infusing them on sticks, which were placed before the fire.

Dodge, E. S. Notes from Six Nations... J. Washington Acad. Sci. 35 (1945) 34-38. The Cayuga, "both the pigeons at night by climbing the trees and removing the young from the nests, adults were never taken, and the white man's method of raising was never used. After each night of hunting the squaws collected more split and hung in the sun to dry. Thus cured, they were taken back to the reserve where they made superior eating, sometimes well into the winter months. Cooked before eating.

Douglas, W. A summary, historical and political... Boston Vol. 47 (1755) 218. They are of great advantage to in their seasons, towards rousting our plantations, the country people feed some of them...[chopped] for some time with Indian corn, and brought to market, and are good, delicate eating.

Anon. Relation of 1662-63. Jour. Relations 48 (1899) 117. Along the St. Lawrence, pigeons are plentiful one season, but the farmers besides having plenty for home use salted caskfuls of them for the winter.
Utilization.


"As the annual meeting of the pigeons was a matter of great importance to the Indians, who depended largely upon the supply so procured, runners carried the news to every part of the Seneca territory, and the inhabitants, singly and in bands, came from as far east as Seneca Lake and as far north as Lake Ontario. Within a few days several hundred, men, women, and children gathered in the locality of the pigeon roost...

"The Indians cut down the roosting trees to secure the birds, and each day thousands of pigeons were killed. Fires were made in front of the cabins and bunches of the dressed birds were suspended on poles sustained by cradled sticks, to dry in the heat and the smoke. When properly cured they were packed in bags or baskets for transportation to the home towns. It was a festival season for the red men and even the meanest dog in camp had his fill of pigeon meat." In addition 40 warriors, southerly bound, stopped there for a few days and secured cured birds for their journey.

Eden, O., and Merrill, W.D. *History of Chautauqua County, New York.* (1874) 269. Judge Frederic New York Census May 22, 1822, that a family on the lake shore killed 400 pigeons in one day with poles. Only the feathers were saved; the bodies being thrown to the dogs. [hops?]

"You may find several Indian towns I met above seventeen houses, that have more than one hundred gallons of pigeon oil or fat; they use it with pulse or bread as we do butter."
Large numbers of pigeons appeared at Haverhill Corner, Draffin Co., the summer of 1770. They were taken to Newmarket, where picking bee was organized and operated two or three times a week. "Those who went had the most of all they picked and the Tyler's lead the feathers; and they made," says Jonathan Tyler, "four very decent beds of these feathers."

Penman, Thomas. Archib. zoologi. 2 (1785) 325, Aniston Blackburne, 1770. "I think this as remarkable a bird as any in America. They are in vast numbers in all parts, and have been a great service at particular times to our garrisons, in supplying them with fresh meat, especially at our out-ports. . . . I have heard many say they think them as good as our common Blue Pigeon; but I cannot agree with them. By any means, they taste more like our Turkey, or Wild Pigeon; but they are better meat. . . . I have been at Niagara when the Centinel has given the word that the Pigeons were flying, and the whole garrisons were ready to run over one another, as eagers were they to get fresh meat."

Quincian, James E. History of Sullivan's Co. [N.Y.], Liberty (1873) 509. "Some salted barrels of pigeons for family use, and added largely to their feather beds and pillows."

Arch. 1.2, 4 (1876) 591. "By invitation I dined that day[1585]... with the principal chief of the Orendage nation, named Big-sky. It's castle lay about three miles east of Buffalo...; some of the latter attended the feast, which principally consisted of young pigeons, some boiled, some stuffed, and the mode of dressing them was, that a bank of six were tied with a deer's sinew around their necks, their tails tied with a deer's sinew, and around their necks, tied with a deer's sinew, around their necks, their tails tied with a deer's sinew, around their necks, tied with a deer's sinew, around their necks,..."

p. 594. Squaws. "After they are plucked and cleaned a little, they are preserved by smoke and laid by for use."

Swanton, John R. *The Indians of the southeastern United States.* (1946) p. 298. "Most important game bird was the wild turkey. "Second in importance was the passenger pigeon, whose roosts were gathering places for Indian hunters at certain seasons.""

Kalm, Peter. *A description...* Arch. 28 (1911) 61. In Canada it is a general custom to take the young from the nest as soon as they are able to fly, place them in suitable quarters, and industriously feed them, when 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 nestings
June 29, 1858. "Sketches of Waukesha County." Signed "Pioneer." In the spring of 1849 he passed thru the town of Warren and having shot several pigeons gave them to "Menominee John." Warren's dressing:

"The squaws first put the pigeons' heads in their mouths, belly up, and blew them up as a boy would a bladder; then cut out their crops, etc. and picked them, and boiled them in water, and then served them up in a skillet with salt."

Eau Claire (Wis.) Leader April 3, 1927. Mrs. Alvin McKnight of Augusta has a pigeon feather bed that contains feathers from 144 dozen pigeons.

Dickman, Robert (furs trader). Letter to John Tane: Wis. Hist. Coll. 11 (1888) 299. Lake Winnebago, March 13, 1814. "As we shall be early in the Lake [Michigan] we shall find Sturgeon & Trout & c. in abundance and perhaps Pigeons, we cannot starve."

Earles, Mrs. E.S. "When wild pigeons flour." Wis. History Bull. 11, no. 3 (July 1924). Nesting at Winnebago, Wis. in 1838. Obtained from Indians about 1700 squabs in exchange for brass rings. In four days their breasts, only, were both pickled & dried."
Utilization

Moore, Panma A. The Hunter J. Lawrence ... Heads
Dairymen 93 (1928) 145. "The passenger pigeon was an
excellent game bird and when properly cooked was very
appetizing. The best time to shoot them was in the Fall...
The larger number of these pigeons were young which
made them of superior quality."

Avery, David Dale. Skelley. Survey J. Mo. and Ariz. up to Oct. 11,

"The government surveyors while working in the surveys
along the St. Croix R. the summer of 1847, ran short of
provisions. The consequences might have been fatal to some
had they not succeeded in killing a few wild pigeons.


"...and beds are sometimes made of their feathers."

Battier, B. M. History of Hadley ... Mass. (1883) p. 359.

"...C. W. Moody says that in former days, they were at
times caught so abundantly in Hadley, that they could
not all be used or eaten, and the bodies of many were given
to the boys, after the feathers were plucked from them. Pigeon
feathers were much used for beds."

Flatt, W. Memorable days in America: ... (1823)
p. 22. "On slops from a long voyage, the Americans take
out roasted quail, partridge, pigeons, in eakes secured
from external air by closing the tops over with melted
lard or mutton fat, so keeping all good for several months."

Quirkishan, E. Ten years of the colony of Niagara, 1780-1790.
wrote Nov. 5, 1785, that the quantity of wild pigeons in summer
would help support the colony."
Utilization

Wilson, Etta S. Personal recollections of the pigeon. And 51 (1934) 163. "Father always sold as many as he could and any surplus was salted down in pork barrels for winter use. Freshened over night in clear water the flesh was almost as palatable as that of the freshly killed bird."

p. 164. Methods of cooking. "But I never ate a pigeon of any cage that was not delicate and delicious."

p. 165. "Pigeon feathers are soft, light in the body feathers, but have not the lasting qualities of goose or duck feathers."

McKnight, Alvin, in litt. Jan 13, 1936. Augusta, Wis. On this year 1877, Charlie Martin, who was my uncle, was trapping near here and told my wife that if she would pick the pigeons he would buy her the heeling to make a feather bed. This was shortly after we were married and she gladly accepted the offer and picked just 144 dozen pigeons. We are still using that bed. We were told years ago that a person could never die on a bed of pigeon feathers, and we are beginning to have some faith in this saying as I am nearing my 84th birthday and my wife is 77 and both enjoying good health, so we have decided to try it out and see if the saying is true."

Jefferson Thomas. 1766-1824. Phil. (1944)

Voice (Courtship).


Wilson [1871] p. 259. "May have the same cooing notes common to domestic pigeons, but much less of their gesticulations."

Audubon. Orn. Biog. 1, 325. Breeding season. "At this period the note of the Pigeon is a soft coo-coo-coo-coo, much shorter than that of the domestic species. The common notes resemble the mornyallys, kee-kee-kee-kee, the first being the loud, the others gradually diminishing in power."

Female: a clucking sound, almost timeless, and cracking sounds of fine or rising notes (W. Craig).

W. Craig. Aug 28, 1911 p. 408. M.B.

Wenskus. p. 120. Illustrating J. pigeons call. p. 120. Allen Bros. at meeting "He. The pigeons kept up a continual roaring by their combined twittering and cooing, so that it could be heard for miles away by night as well as day."

p. 58. Ben O. Bush. "What wouldn't I give to hear the call note J. Tete! Tete! Tete! I the pigeons once more."

P. 51. Pohangin. "I tried to understand their strange language, and what they all chatted in concert. "On the third day after, this chattering ceased ..." p. 84. Roney. "... the twittering grew louder."

p. 157. "He says he heard them call and they made the same old crowing call of the wild pigeon."
Brewster, Aug 6, 1884: 287. Most of his information was from S.S. Stevens, Cadillac, a veteran hunter. "Pigeons are very noisy when building. They make a sound resembling the cracking of wood frogs. Their combined clamor can be heard for a mile or five miles away when the atmospheric conditions are favorable."

Bendire 1, 1893: 138. Their notes during the mating season are said to be a short "coo-coo" and the ordinary call note is a "kee-kee-kee", the first syllable being louder and the last fainter than the "middle one."

French, 1905: Not or coming fue pigeons could be heard. "The twittering jettison to the pigeon when a flock was lighting on the ground to feed, could be heard in every direction." p. 96. "It was not long before the flocks were scattered, and the low, gentle cooing of pairs of birds riddling up together on the limbs of the trees, indicated that pairing off and choosing places for nests was going on."

French, p. 205. Charles H. Eldon. "The flutting of the wings and the cooing of the birds seemed like almost a continuous roar."

French, 1933. Edwin Haskell, Pulaski County. W rear Oct 21, 1908. "...a vague impression of the immensity of the number of birds and the peculiarity of the gentle cooing sounds that filled the woods."

French, p. 227. C.K. Searle. "Some hunters and netters were expert in calling male wild pigeons, which uttered a shrill note, most frequently heard when at rest, but sometimes made in flight. The" call": werd was made w two wooden flutes and a piece of silk ribbon twined on a violin string."
Voice

I owe, Percy R. 28 Nov. 11, 14 (1922) 138. after alighting on trees and before dropping to the ground to feed... the flock would always first alight in trees, and the birds would commence their sweet plaintive calls, which were very similar to those of the domestic pigeon but with a very much prettier trill and accentuation, and a curious sonithological effect. — A.B. Welford.


"Backwoods," in wild pigeon days. F. 45, 44 (Feb. 16, 1895) 126.

... after gorging with seed and alighting on trees... they will emit a call or cry to parerf planks... the call does not at all resemble the cooing of our tame pigeons, but on the contrary is more like the quack of some of our small ducks in tree, not prolonged like the duck, rather more harsh and very quickly repeated; once heard by the sportsman, never forgotten.


... very peaceable and social bird. Its friendly nature was particularly noticeable when one flock passed another. Birds on the ground, despite their interest in feeding operations, would always take time to hail newcomers with a call peculiar to the occasion. It was a long-drawn and moderately loud repetition of the note, which sounded like 'tweet' and this would cause the flying birds to alight in nearby trees, giving in their turns a low call 'tret, tret, tret.' To me these seemed to be notes of greeting, while their sounds were indicative of fear. For instance, the female call-note is similar to the 'tweet' above, but the male response is a low 'boyn', which cannot be heard farther than two or three hundred feet. My knowledge of these notes is due to the fact that I learned to imitate them perfectly, in order to call the birds up within good shooting distance."
"Near the sharp quiet & pigeons at the Thrusk Alley clearing."

"I scarce pigeons from Hubbard's oak beyond. Now like the cracking of trees, the slight sound they make! Thus they are concealed. Not only their prating or quiet is like a sharp crack, but I heard a sound from them like a dull grating or cracking of tough or bough." (Vol. 7, p. 33, April 12, 1854)

"The prate of the last is much like the cracking of a tree."

"Heard a singular sort of series, somewhat like a hawk, under the cliff, and some same pigeons flew out at a pine near me."

"He [Brooks] placed them in a cage on the bed and could hear them prate at the house."


Baird, Bureau & Ridgway. Vol. 3 (1874) 368-374. Note:

"coo - coo", "kee - kee - kee."


"Brustler W. Birds Lake Unabegog. Part 2 (1925) p. 389. "I do not recall ever having heard one of these utter a vocal note of any kind at any season."


Voice

Howitt, Henry. A short history of the passenger pigeons. Can. Field Nat., 46 (1892) 28. "From the jet my brother James and I learned something of the meaning of the calls or words of the Wild Pigeon; its calls were few, differently arranged as to import, and could be voiced by three letters, F. W. E. According to my memory, Tweet, Tweet, Tweet meant 'Come here,' Good, and 'Safety'; and the call Time in low tone, 'Danger; fly to cover.' For a person to voice the calls correctly required considerable practice."

MacTaggart, John. Three years in Canada ... Vol. 1 (1829) 234. "They breed together in the woods by millions, and the singular noise they make in their crowded nursery, or matrimonial haunt, surpasses any sound I have ever heard; it is a loud and confused buzz of love."

Scherey, L. E. Passenger pigeons in northeastern Pa. Cardinal 5 (1899) 38. "If a person imitated the calls of the passenger pigeons as they flew over the timber, some of the birds would alight on the trees near him; then other pigeons, seeing them stop, would join them in the trees; this would attract still others, until the trees were full. They could not always be driven down when they were going out to feed, sometimes they simply refused to come. Their call as Mr. Oviatt described it, was somewhat of a shrill, perhaps somewhat shrill, "tweet," "tweet," "tweet," "tweet," "tweet," "tweet," "tweet," sometimes with several more "tweets" on the end. It is a common flight call, and was also given at times by birds in the trees or on the ground."

They also had a "friendly call" which, when continually given by thousands of birds at work, building their nests, made a clatter that could be heard a mile away. A similar call was a calling one that he had heard from birds that were alone, as in a swamp...

"When struggling beneath the nets, the pigeons gave quack-like
The only noises he had ever heard from the still-fed birds were grunt-like chirps, very similar to those of the mated birds.

Kalm, Peter, in description of July 28, 1791, 60. “These pg.96: pg.97 pigeons kept up a noisy murmuring and cooing sound all night, during which time the trees were filled with them, and it was difficult to obtain peaceful sleep in account of their continuous noise.”

Craig, Wallace. Recollections of the pigeon in captivity. Bird-lore 15, 1913, p. 96. “They had little of the soft, cooing notes so familiar in all sorts of doves, but showed extreme development of the hard, unmusical notes which in most doves are subordinate to the coo.”

“The most characteristic utterance of the species was a series of “talking,” which ever varied with the mood of the bird, now rising into a loud, shrill cackling, now sinking into a soft, low clucking, and sometimes diminishing into single clucks. In addition to this vocal flow of talk, the male sometimes shouted one or two single, emphatic notes sounding like a loud, deep, deep, all these sounds were full of meaning and expression. And their expressiveness was greatly enhanced by the bird’s movements.”

pg.98: “But the chatter of the passenger pigeon was heard on all sorts of occasions, and accompanied nearly everything he did. If he picked up a straw and carried it to the nest, he talked about it while he was searching on the ground for straws, clucked a few times as he flew up, and chattered to his mate as he gave the straw to her.”
Fayre, W. Memorable days in America... (1823) p. 194.

"The screaming noise they make when thus roosting is heard at a distance of six miles."

Knight, C.W. The birds of Maine. (1908) 211.

"The old settlers said that their notes were a 'coo, coo' similar to our hoots and quicker than the note of the common domestic dove while they also had a call note much like 'see-see-see'."


Ashburnham, Mass. On March 30 he heard "the old familiar note of the pigeon, which used to be so plenty."

Thoftingwell, W.B. Shooting in upland... (1890) p. 228.

"Shooting on stands. At this time, from the long time, there was called, rapidly, "heek, "heek, "heek", this cry being the bird's first mode when feeding or carefully searching for food."

Ebling, Walter E. Letter Sept. 18, 1945; and memo I interview with his uncle, Henry Ruth, Hartford, W. "He said they had a shrill call that sounded like "freez" - a sharp, shrill, high-pitched call which was repeated as they would call back and forth. - "Their calls were heard and repeated most frequently when they were sitting on the oak trees or near the springs where they got water."
Weather

French p. 14. "The winter of 1876-7 was an open one... Heavy snow, falling in March, caused the death of many by starvation and exposure... many migratory birds remained all winter, at the north."

p. 15. In Jan. of 1876, 650,000 miles came to Allegheny Mts., on line between Cambria & Somerset Counties. "... Blackbirds and chaffinches were abundant. Roosted in cedar swamps in northeastern Cambria Co. A fall of snow came about the first of March and the birds disappeared.


"At the morning of the day, and the noon encampments, the men for one day wholly subsisted on them; fatigued with their flight in crossing the lake, they alight upon the first branch they can reach to, many so weary as to drop in the water, and are easily caught; those that alight upon a branch being unable to fly again, the soldiers knock them down with long poles."

French p. 106. Edwin Haskell. Early in the morning, when the pigeons were hungry, was thought to be the most favorable time to lure them to the net. As might happen, however, that clouds would prolong the twilight, or a dense fog shut out from the ground the rays of the rising sun, rendering it difficult for the birds in their flight, to discern objects near the earth; when this was the case the pigeons flew high. An attempt to attract their attention would be useless.
Weather
Catesby, p. 234. "In mild winters these are few or none to be seen. A hard Winter drives them South for the greater plenty of mast, berries, etc..."

Backman, Rev. John, Ann. the migrating of the birds of North America. Am. J. Sci. 30 (1836) 89-90. "The wild pigeons is another of these birds, that are supposed to be driven away us by the extreme cold of the north. This is a mistake. These birds appear in Carolina, only at very long and uncertain intervals. Sometimes they visit us in cold, but frequently in mild winters. I have seen wild pigeons in immense flocks in Canada, in the coldest winter, when the thermometer was below zero. It is to be remarked that the previous autumn had produced an abundance of beak, nuts, and buckwheat, their favorite food, and that the ground was not covered with snow. It is only when the forests of the west have failed in their most supply of mast and berries, that the pigeons come among us, to claim a share of the acorns..."

Bartram, William. Travels... (1791) p. 469. "Names acorns which induce these birds to migrate in the autumn to those Southern regions where they spend their days agreeably, and feast luxuriously, during the rigors of the cold in the North."

Clinton, De Witt. N. Y. Med. Phys. Jour. 2 (1823) 210-5. "Can stand cold, severe. Large flocks were observed in Albany and the north-western parts of this state in January and February, 1817."
Weather.


A severe snow storm commenced on Tuesday [March 25] night, and continued all yesterday, accompanied by high winds. Such a storm at this season is very uncommon. The pigeons, which had commenced their emigration in large numbers, has been cut short in their course. Thousands of them are in the valleys in this vicinity. In Wendell's Hollow, at the south part of this city, yesterday, they were in great abundance, and there also created the storm, in search of them, with their guns or nets, returned well loaded with those birds." Snow 18" deep.

From various papers I have learned that the same storm that began at Albany March 25, came from the northeast along the New England coast and extended beyond Philadelphia. Four N.Y. papers consulted had nothing to corroborate Audubon's statement of abundance of pigeons in N.Y. market.

Ames, C. H. Breeding the wild pigeon. F. S. 56 (June 13, 1901) 464. Letter from Prof. C. O. Whitman, Univ. Chicago, May 20, 1901. "They are very hardy, living outside all winter; in my back yard in fences that are protected from wind, Baxend, Brown, and Ridgway, Vol. 3 (1877) 868-74. Evidently the temperature has little to do with their migration, as they not unfrequently move northward in large columns as early as the 7th of March, with a thermometer twenty degrees below the freezing point. The spring of 1849 immense numbers collected on Fayston Mountain, near Montpelier, Vermont, although at the time of their coming the weather was very cold and the ground covered with snow."

that large quantities of pigeons had been drowned and washed up on the northern shore of Lake Huron about twelve years ago.

Barrows, W. B. Michigan bird life. (1912) p. 246. According to Dr. Jesse Voorhees, the large nesting in Benzie Co., Mich., in 1880 was broken up by an approaching snow after most of the nests had eggs. The birds left in a body and never returned.

Merriam, W. B. Pigeon. (1907) 121-2. From E. B. Born. In 1865 was at a nesting in Canada, near Georgian Bay, the snow being 3' deep on the ground. Nesting near Fond du Lacs broken up by heavy snowstorm.

Cooper, Susan Fenimore. Journey to New Orleans (1856) Vol. 2, p. 125. June 8, 1848. Raining morning. It appears that yesterday we missed a fine sight: about dawn it began to snow. A large flock of wild pigeons passing over the valley, became bewildered in the mist, and actually alighted in the heart of the village, which we have never known them to do before. The trees in the churchyard,” etc.

Cook, Sullivan. What became of the wild pigeons. F. 45, 60 (1883) 205.

... once in the month of November, while the pigeons were going to their roost in the Cedar Swamp (Medina Co., Ohio), they were met with a storm of sleet and snow. The wind blew so hard they could not break it, and were compelled to alight in a sugar orchard near our place. This orchard consisted of twenty acres, while the hiber had all been cut out, except the maple, and when they commenced lighting, the trees already partially loaded with snow and ice, and the mass piled on pigeons being attracted by those alighting, all sought the same resting place. Such numbers alighted that in a short time the branches of these trees were broken, and as fast as one tree gave way these birds etc.

p. 286. States that they always nest in the borders of the snow.
Weather

Collins, Herman R., Disappearance of the wild pigeons, P. 4 S., 79 (1912) 235. "A related snow storm that covered the ground for several days resulted in confusion among the migrating pigeons. It also furnished a good proof that they ordinarily nestled, if not they took on their great journey, during the night time, for except at such snow periods that rapid travelers were never seen to stop or eat."

"I have known a big flock of pigeons to settle upon a barn and all around a farm yard when there was snow on the ground. They were seeking food."

Bartee, Anne W., The birds of Indiana, (1898) 761. "Some found them frozen to death in severe weather in the winter.

Fuller, A.R. "Spring at Meacham Lake [Franklin Co., N.Y.], P.4 S. 6 (June 15, 1876) 301. May 1, 20" snowfall. May 2. "Pigeons flying in all directions."

Martin, E.M. "What became of all the pigeons?" Act. 64 (1914) 479. See under 1878 birds forced by snow storm to drop eggs at Crooked Lake, Mich., nesting.

Edson, O. and Merrill, O.D., History of Chautauqua Co., N.Y. (1894) p. 269. "In 1833 a snow storm came in May which destroyed great numbers; their dead bodies were found everywhere in the woods and fields. Great numbers were found floating in Lake Erie and the lakes and streams of the county."

Fries, Adelaide T., Records of the Moravians in North Carolina. Vol. I (1922) 235. Near Salem. "In the first week in January [1761] there was a two-foot snow, which at last drove the wild pigeons away, after two months in the Petersbach."


Weather

Greenleaf, Rev. P. H. Observations on the flight ... Medford, Ind. March, 1855. Proc. Boston Soc. Nat. Hist., 8 (1859) 182. "The next day [March 10] an occasional flock passed, until a heavy rain drove them to the earth, and thus the trees in the neighborhood fairly broke down, in some cases, from their weight. The rain on Sunday [11th] prevented their flight, and the sportsmen were stayed."

Bryant, C. A. The passenger pigeons. F. & S. 30 (April 19, 1873) 494. "The spring flight of pigeons did not seem to be at all impaired by the cold winds and weather. They had reached the north, but in the fall the short cold days usually started the pigeons south."

Munro, J. The annals of Albany. 9 (1858) p. 206. "Thousands of pigeons were overwhelmed."

Editor. Wild pigeons. Chicago Field 13 (April 24, 1880) 168. "A severe snow storm caused the birds to leave. Before leaving they laid their eggs, and the ground for many miles is said to be strewn with the eggs."

Edison, B. and Merrill, M. D. History of Chautauqua County, New York. (1894) 269. "Vast numbers perished in a snow storm in May, 1833."

Maradan, W. C. What has become of the wild pigeons? F. & S. 83 (Aug. 1, 1914) 46. "Long and interesting account of pigeons caught by one first snowfall in Sullivan Co., Pa. in April, 1868, starving to death."
Weather


"When the flocks were met by cold weather after their arrival, they waited for a warm spell before they began their nesting. When once they had begun, the nesting proceeded rapidly.

After the early-coming pigeons would begin to nest, and then, in an onset of cold weather, they would be "frozen out" - the eggs of the entire city would freeze. If not then melted, they might remain, renew their efforts when warm weather returned, and carry through to success. Usually, however, they moved off and with the return of warm weather nested wherever they happened to be. Rainy spells or unusual weather conditions had no effect on these squabes.

Engells, James. The pigeon days. Grand Rapids Press, Nov. 4, 1933.

"I was looking up homesteads --- that fell [881] ... between Cross Village and Caro Lake, five miles south of the Straits of Mackinac. This was the middle of last 9 October [?] and the pigeons were on the other side of the Straits ."

"They seemed to know a storm was coming and they wanted to get on this side. When we started, they all started to come across. The wind was coming from the northwest and it was raining a little. There came a heavy sleet while they were flying and it loaded them down so every bird dropped into the water and was drowned.

"In the day between Cross Village and Caro Lake there is an ome and the next morning there was a window of dead pigeons for about five miles along the beach. That was the last I see pigeons for me. I have seen but me since then."

"The Indians at Cross Village lived on the dead pigeons all that winter. I do not think there is a man living who was there except myself."

*Emmet Co.
Weather

Kalm, Petits, A description ... Aug 28 (1755) 57. Ro
flight in eastern Pa. in 1740: "About a week or a little
later subsequent to this appearance of this enormous
multitude of Pigeons from Pennsylvania and New Jersey,
as a sea-captain by the name of Arner, 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 tremendous numbers of
this species have been seen in Pennsylvania.

p. 58. From conversations with the oldest inhabitants, he
drew the conclusion that these tremendous flights
occurred at intervals of 11 to 12 or more years.
Rector Colden, living on the Hudson at intervals of several
years, had also witnessed unusually large flights.

Turner, O. History of pioneer settlement of Phelps ... Purchase
(1851) 395. Statement of Ammi Ellsworth who settled at Sodus,
Wayne Co. (On Lake Ontario), N.Y. "On another occasion, an
unusual quantity of beech nuts and mild weather, attracted
myriads of them to the neighborhood; the weather suddenly
changing to severe cold, the woods were strewn with those
that had been frozen to death."
Weather

Magazine, W. Down the great river. Phil. (1841) 64.

July 21, 1861. Near Lake Itasca, Minn. A dense fog which completely enveloped the camp in our immediate front prevented our getting upon the trail until seven o'clock in the morning of July twenty-first, and it was even then impossible to distinguish objects at a distance of twenty yards. While waiting for the fog to raise, a small flock of pigeons dropped into the lake I saw some tall pines near by.

Mershon, W. B. The p. j. pigeon (1907) p. 134. "The pigeons were numerous on Lake Superior in 1872, for I have recollections of catching some that year while captaining the steamer Japhet. During foggy weather and at night, they would alight on the boat in great numbers, tried one. On foggy mornings the frowning of our whistle would start them up, and from their usual height on the top of the oversea overhanging deck, we could smell along under the deck and quickly snatch me. I remember leaving caught several in that way.

Ames, L.H. The wild pigeons and their fate. F. A.A. 65 (Sept. 9, 1905) 211: "Many years ago when a flight of pigeons was overwhelmed by a tornado in the waters of Lake Michigan, the bodies of the drowned birds being thrown up in thousands on the lake shores above Milwaukee."


Culberson, E. The manuscript journals of Alexander Henry. N.Y. 1 (1897) 4. April 11, 1800. "The Terre Blanche having
been clear free for some time, I embarked in my canoe for Portage la Prairie. Weather excessively hot. Wild pigeons passing N. in great abundance. On a few days we experienced a dreadful snowstorm, which continued with great violence for three days, when there were three feet snow upon the ground; but it did not remain long.

Head, George. Final scenes and incidents ...(1829)


Amidst to the sound of pigeons and found a dead tree as thickly covered as possible with them. These birds arose and with them large numbers of other trees that could not be seen in account of the fog. After shooting some, stragglers flew about in circles.


One spring the pigeons arrived too early. A snow storm covered the ground to a depth of 7 to 8" and remained several days. The pigeons became desperately hungry. On the edges of the streams and around ponds, where the snow melted first, there was a blue border of pigeons trying to find a little food. They went into the barnyards and into the farms where doors were left open.

McKee, W. J. Science 33(1910) 959. On two or three occasions early flights encountered storms and at least one case many died.
Chicago (Ill.) Daily Journal March 14, 1855: "Pigeons.

During the storm yesterday, clouds of pigeons were circling in the snow-laden air, now over the city, and now above the lake evidently bewildered, and at law wind to make g the wild winter that met them on their southward way.

"This morning, however, having recovered their self-possession, large flocks of them bore away to the south..."


"A Titusville, Pa., resident recalls that on March 24, 1855, in a tremendous snow storm great flocks of pigeons were blinded and bewildered, and coming to the ground were killed by hundreds."
Weight

Forster, J.R. An account of the birds sent from Hudson's Bay. Phil. Trans. 62 (1772) 398. "They weigh 9 ounces."

Wrighting.


"The Columba migratoria, Passenger Pigeon, commonly returns from the northward late in the fall, and continues with us a few days, or weeks, feeding in our fields upon acorns. But if the season be a very mild one, they continue with us for a much longer time. This was the case in the winter of 1792-1793, when immense flocks of these birds continued about the city, and did not migrate further southward, until the weather became more severe in the month of January.

The winter of 1792-1793, was one of the mildest that had ever been remembered in Pennsylvania. It is a common observation in some parts of this state, that when the Pigeons continue with us all the winter, we shall have a very mild summer and autumn. . . . the mild winter of 1792-1793 was succeeded by a dreadful malignant fever, which destroyed between four and five thousand people in Philadelphia, and I am assured, that the same fever in 1762 was preceded by an extremely open winter, during which the Pigeons remained about Philadelphia, and in other parts of the state.

"Large flocks of these birds return all winter among us unless the winter be very mild."

"I say 'large flocks,' for I believe individuals of these birds continue with us almost every winter."

B. H. S. M. Improving wild pigeons. F. 5, 14 (July, 1880) 433.

Kenca, MeKeen Co. Pa. nesting 9, 1880, "The few stray birds remained in the neighborhood all winter."

Wintering.

Weather... Jan. 9, 1837, Wild Pigeons flying in flocks close and cold. Feb. 10. A flight of Pigeons past by Northerly cold and cloudy.


Niles, Rev. W. C., Whi. Nov. 4, 1846. Very numerous flying north. Visited them for days. Dec. 12, 1846. Threw corn, with snow, but "the air was filled with pigeons flying north." Under the N.W. a date states that not since 1829 have they been seen at this season. However, under date Dec. 4, 1839, states that Henry Keats recently killed 784 pigeons in 18 shots. This could mean anything that fell.


Buller, Amos W. Rains of Indiana. (1848) 764. Roost at Brockville, Franklin Co., Ind., in Jan. & Feb. 1834. This is from Haymond.


"Through the whole winter, immense flocks are seen passing out in the morning to their feeding grounds... in quest of acorns..." [This would affect locating spring nesting].
Wintering.

“Through Franklin B. Raccoon’s meteorological observations ... New
York, 1850-1862, Albany (1872) 848-58.

Dec. 9, 1858 at Rochester, N.Y.


“in some winters there are immense quantities of wild
pigeons in Pennsylvania.”

Scherer, J. E. P. J. in N.W. Pa. Cardinal 5/1939, 27. [From
J. B. O’Gall, Summit, Pa.] “Sometimes a few birds were
about in winter.” Fed along spring run.

Means, James. A geological account of the United States.
Philadelpria (1807) 347. “During the present season
(1806-7), which, upon the whole, has not been severe, they
were accidentally seen in our [Philadelphia] markets.”


“Unusual migration.” “Immensely numerous, flying from
west to east on 16th and 17th.


Field 17 (Jan. 14, 1882) 52. Am Dec. 24, 1881, one
large and two smaller flocks flew near Platteville,
Wis. Lived here 30 years and never heard such a
thing at times.

Cooke, W.W. Report on bird migration ... Bull. 2 (1865) 108.

“26 winters usually from latitude 39° and always from
latitude 36° south ward.

Report, Ind. Survev, Ind. (1867) 226. Large wave at
Platteville, Jan. 9 Feb. 1854.”
Wintering


"occasionally taken in winter"

Maynard, Edgar A. Notes on some of the least hardy winter residents in the Hudson River valley. Natt. Bull. 4 (1874) 37. "Of unusual occurrence in winter; generally in very mild weather, when the ground is bare."

Maynard, C. J. Birds of eastern N. America. (1881) 337. "Although I have, on one or two occasions, seen Wild Pigeons even as far north as Massachusetts in winter, this is beyond their usual range at this time, for the greater portion pass the cold season in the south."


Samuel, Edward A. Ornithology and Zoology of New England. (1868) 373. "It is a resident of these States through a greater portion of the year; only absenting itself in the most severe portion of winter, when its food is usually covered with snow."

Schuyler, Unpublished Manuscript by Cotton Mather... "(1635) (1638) 473. "About 1712."

"two worthy persons & my Aquaintances had a Present of Shoes in his Neighborhood in 4 months of December, a very unusual time of the Year, whilst there was yet no Snow, but many Acres on the ground, which tos thought, might then draw ym ther."
Wintering birds. The winter of 1876-77 was an open one.

French, p. 14-15: "During the winter of 1876 or 1877, about the first of January, that portion of the Allegheny Mountains, where the line dividing the counties of Cambria and Somerset is located, was visited by millions of pigeons. There was no snow on the ground during January and February of that year, and most in the form of acorns and chestnuts was abundant."


"S. S. Miller, of Springs, Somerset County, sent me the following information, quoted from the diary of his father, S. J. Miller, for January 1, 1877: 'Thermometer at 62° at 7 A.M. and at noon about 72°; it has been so for some days. ... Immense clouds of wild pigeons moved north in the morning and returned in the evening.'

Wheaton, J. M. The bird and birds as related to agriculture.

And Agr. Report (1874) 571. 'Resident wild flocks.'

Y. W. T. Wild pigeons. T. S. S. 10 (Feb. 28, 1878) 65: 'Clarence, Lebanon, St. Clair Co. Feb. 17. 'Wild pigeons for the last few weeks, been quite abundant in the Kiskaskia River bottoms, twenty miles south of this city. Are now plenty here, and have for two days been parrying northward.'

Anon. Passenger pigeons reminiscences. Cardinal 1, no. 3 (Jan. 1924) 7-11. 'Some pigeons stayed throughout the year at Scranton, Pa.'
Wintering.


Pigeons have been numerous in Forest Co. Pa. all the winter of 1877-78.

"Penn."

Wild pigeons]. Ann. Field 17 (Feb. 25, 1882) 147.

Warren, Pa. Feb. 17. "All winter a few flocks have been staying in the big woods 9 Forest county... where the feed is abundant, with little snow."
DISTRIBUTION (WINTER)

Bent (1932), p. 400-1. "The vast numbers of these birds and the extensive areas included in their breeding grounds considered, the winter range was greatly restricted. Data bearing upon this phase of the subject, however, are not plentiful. Apparently at this season the species extended

north regularly to Arkansas (Rogers); southeastern Missouri (Attie); and northern South Carolina (Clutter County).

East to South Carolina (Clutter County and Sineath Station); and Florida (Amelia Island and Gainesville),

South to Florida (Gainesville); Alabama (Greensboro); and Louisiana (Mandeville).

West to Louisiana (Mandeville); and Arkansas (Judsonia, Fayette, Siloam Springs, and Rogers).

In some seasons large numbers wintered much farther north as they were recorded as abundant in the winter of 1853-54 at Brockville, Ind.; a flock of about 300 was seen near Harrisburg, Pa., December 25, 1889; and some wintered near Hartford, Conn. in 1882-83.


A few flocks have been staying all winter in Forrest County, 20 miles south, where feed is abundant.

Maximilian: Travels ... (1843), p. 92. "The winter [1832-3] which we passed at New Harmony [Ind.] was, on the whole, mild. Pigeons were seen in the orchards the whole winter. In Feb. 8 flocks of pigeons flew north and east.

— J. J. Craft, Annith. 5 (1858) 423. Fairly large flocks seen at New Harmony in January, 1833."
French p. 30. William French. "When the young birds fluttered from the nests in large numbers they started at me and kept going a-head, in spite of the wild animals and hawks that killed many of them. If they came to a road they crossed it; a stream, they flew over; or they fell exhausted on the meadow, and, flapping their wings, swam to the other shore and ran on until night. When their fat bodies were reduced and muscles grew hard they returned in flocks to find their

p. 47. "The young, the males, and the females had a curious habit of dividing into three separate flocks. When the young leave their nests they shift for themselves, passing through the forest in search of their food, hunting among the leaves for mast, where their parents made certain, in advance of nesting, that plenty could be found; and, by feeding in distant parts, preserved feeding grounds for the young

Brewster (1843)
Deane (1886)
F.S. Thompson (1881)
Roosting.

McCaulley, F. B. An Ohio pigeon roost. "Turf, Field & Farm" 30 (Jan. 9, 1886) 21. Roost in the Godi swamp, covering "several thousand acres," Medina Co. The center of the marsh was open, a part of natural cranberry plantation, while the outer ring for half a mile deep was thick with a growth of alders, growing ten feet high, and outside of that nearly all around for another half-mile was tall timber, mostly ash, maple and burr oak. Fed in the beach woods. In coming to the roost at night the birds first alighted in the timber before returning to the alders. This was done also before leaving for feeding in the morning.

Scherer, J. E. P. P. in M. W. Penn. Cardinal 5 (1939) 34. Mr. Crisotti said that when the pigeons were traveling through in the fall, he had seen them come in just at dark to roost in the low beach brush to which the leaves still cling. The birds often perched within reach of the ground, and a person might suppose it an easy thing to catch some of them after dark, but it was not so.

The birds keep flocks going over on moonlight nights. He did not know the reason for night flights, but thought it likely that on these many nights they had been shot out of their nesting grounds elsewhere.


There was a "Pigeon Roost" four miles from Marlinton, Pocahontas Co. "Where I have myself seen the enriched land still marked by an unusual growth of vegetation, the luxuriant poke ... flourishes there, and other plants not natural to that class of soil."


Fall of 1866 there was a roost in Newaygo County, Mich. in "about four square miles of oak groves and
small oak as thick as could be, as the pigeons had roosted there six years before and it was well fertilized. The oak queks were built to the ground with pigeons.

Sutton, George W. Birds of Pymatuning Swamp... (1928) 118, [R. T. Ferris, J., W. O. Hager. Some were caught in nets; others were killed in their roosts at night with gas guns.


"As sometimes happens that having consumed the whole produce of the beech trees in an extensive district they discover another at a distance perhaps of forty or eighty miles, to which they regularly repair every morning, and return on regularly in the course of the day, or in the evening, to their place. I general rendezvous, or as it is usually called the roosting place. These roosting places are always in the woods, and sometimes occupy a large extent of forest. When they have frequented one of these places for some time, the appearance is startling. The ground is covered to a depth of several inches with their dung; all the tender grass and underwood destroyed; the surface strewn with large limbs of trees broken down by the weight of the birds clustering one above another; and the trees themselves for thousands of acres, killed or completely as if girdled with an axe. The marks of this destruction remain for many years on the spot; and numerous places could be pointed out where for several years after, scarce a vegetable made its appearance."

"nature is not so cruel."

"nature is not so cruel."

"nature is not so cruel."

Fall of 1840. Vireo (Wis.) Census, Dec. 1, 1880, [1].


Fall of 1880. Vireo (Wis.) Census, Dec. 1, 1880, [1].


On another day of this same flight (fall of 1885), at dusk, a
flock numbering several hundred was flushed from a
high, untrimmed hedge of orange orange, in the town
of Mediersville [now part of Cincinnati], where they had
eventually gone to roost for the night."

Farr, W. Memorable days in America... (1823) p. 298.

Roots in barrens of Kentucky. Break limbs of
large trees and bend saplings to ground. Killed by
starting on encircling fire.

Linncevus, Rev. Gideon. The nesting of wild pigeons. Am. Sportsman
4 (June 27, 1874) 194. "For this they prefer an elevated country
with large timber. Here they all come to sleep every night, and
it is curious to see how they can pile up on the branches of a
thick tree top, until it breaks down, or becomes a solid
mass of birds... The breaking limbs of the trees, the swishing
and groaning noises and the storm of wings that was mo-
mentarily occurring, over an area of forty or fifty square
miles, kept up a continuous uproar that was wonderful
to contemplate. The ground lay strewn with dead and
crippled pigeons; lizards, fowls, raccoons, and oppossums
all became so fat they could barely get out of the way."
Remained 6 weeks. When the acorns were exhausted they
departed in a single day. The value of the soil in a
pigeon roost is increased at hundred per cent.

Hall, James. A brief history of Mississippi. (1801) 56-8. Descriptions
for roosts near Big Black R. Mississippi. (Under: James Veece).
By the "Chickasaw Nation" he probably refers to their towns
in Union and Pontotoc Counties so that the roost was
probably in Clay Co.
Rosetny

Paul Fountain, The great north wind. (1904) 218. "I admired those large trees not confined exclusively to junipers. For other trees are frequently chosen, especially alders, which, for some reason or other that I have not been able to discover, invariably flourish in the old river meadows."

George, Th. J. The passenger pigeon in Missouri... Aug. 28 (1911) 259. "Roset on Montana Creek, 4 miles from Pigeon, known to this day as the 'Pigeon Rose.' In the roosting place the trees were broken in pieces by them and thousands would be left crippled or killed - for the force and utter wild animals to feed upon." Regan retuning to roost about 4:00 P.M. and continued until 5:00 dark to see.


Be a roost in October near Oakland, Harrett Co., Md. The pigeons collect nightly on a tree 8 pounds covered with slender, covering about six acres. . . . So great was the number of birds that they were piled upon each other, in places, from one to two feet in depth. The pigeons continued flocking in and sitting upon and among each other from four o'clock in the afternoon until nightfall. . . . Depart at dawn and by 9:00 its place is deserted.

"The Captain." Pigeon shooting in the early days. F.Y.S. 68 (April 27, 1907) (At Pine Creek, Ore.). "The pigeon roosts were generally in the heaviest timber, generally near a stream, and in the three instances of which I had knowledge were located in the same place by each flight... The pigeons checked their flight and settled down in the lowest limbs of the tallest steepest trees, beginning about 5 0'clock in the evening and continuing until dark to fill tree after tree until every available inch of space in the limbs was occupied, those arriving toward the last often flying against those already in possession, and
Roosting

knocking them off their perch... As far as the eye could see
the air was filled with the flying birds, not in flocks but
in steady downpour of feathered life. There did not seem to
be any diminution in the velocity of their flight, or any
slowing to the height in the air at which they were traveling
until they were within a few rods of the earlier arrivals and
then a downward sweep with distended wings. The nearness
of bird to bird, and their continuous arrival resembled the
pouring of a sheet of water over the incline of a dam in
a dam across a stream.

"The great numbers of pigeons settling on the same limbs,
in the every available inch of space was filled, supplemented by
the late arrivals often momentarily settling on the backs
of those already in possession, frequently caused an overloading
that even the strongest limbs could not withstand, and it was
not uncommon to see branches five or six inches in diameter
at their point of separation from the parent trunk broken
at this point by the weight of the birds hanging earthward. When such a
break occurred, not only the pigeons that were disturbed by
its breaking, but those on other limbs of that and
nearby trees arose in the air and found other resting
places, making a continual hub-bub. It was often an
hour after the last arrivals before there was comparative
quiet, and this was broken at frequent intervals by those
of the larger and more vigorous birds pushing the tired
so weaker ones off their perch."
Roosting

Révoil, Benedict. The hunter and the trapper... London (1877) 126-37.

Describes a roost along Green River, Ky. The birds began to arrive at sunset and continued to come until 11:00.

Kentucky Brand, Hann (Mich.) News Dec. 20, 1865: Immense numbers roosting along railroad line between Louisville and Nashville, Tenn. "The pigeons through one night on the Green River Bridge in such numbers that the safety of the structure was imperiled."

Beck, Herbert H. Historical sketc of rural life in sports...

Banister Hist. Dec. 27, 1923 152-3. Roost northward flight of pigeons over 8 miles in spring 1846, lasting from 12:30 to 4:30 P.M. "Their crops upon direction were found to contain indigested rice, cune mighty detachment of the main flock settled upon the orchard of the farm which, later, we knew as Johnson's Miller's, breaking off, with their fide up weight, thick limbs of the apple trees."

Mintz, H.D. The land birds and game birds... (1877) 378.

"They are most abundant near Boston as migrants in April and October. Here is a low pine-wood within the present limits of the city, in which I have known flocks of several hundreds to roost every year, but I have never known them to be disturbed."

Ann. East of the wild pigeons. N.Y. Sun March 7, 1909. Nesting at head of Delaware in 1857. "The pigeons paid no attention at all to the fires that gleamed everywhere near to the men who with long poles collected them in throngs from the low lying branches. Frequently the whole under part of an entire broad over laden tree would snap off and come down with a crash, carrying with it not only its own mass of living freight, but crushing to death countless members of young and old birds on the lower branches. Those of the disturbed pigeons that were
Reptiles

mating would struggle wildly upward again, trying to get
a foothold somewhere among the trees. If they could not again
a roost in the tree from which they had been hurled, they
would huddle together on the ground beneath it and fall
victims to the clubs of the sloughliners.


"There were pigeon roosts in our country and in other parts
of southwestern Missouri, some of them a mile or so in
length and breadth, where they roosted every year for several
years and dropped their excreta in plumes to a depth of two
or three feet. The pigeons appeared nearly every year.
Did not remain throughout the winter. In fall after
exhausting the nest went further south returning in spring.

Went to shoot in a roost in the Edge swamp, Medina Co., Ohio.

As we approached this nest body of birds, which bent the alders
flat to the ground, we could see every now and then ahead
of me a small pyramidal which looked like a keystone in
the darkness, and as we approached, what appeared to be
this keystone, the frightened birds would fly from the bolstered
alders, and we would find ourselves standing in the
middle of a diminutive forest of small trees and alders
and willows. We now found these apparent keystones
were only small alders or willows completely loaded down
with live birds."

Green, E. M. The old tamarack swamp. F. 45. 22 (July 3, 1884) 444.
Swamp 2,000 to 2,500 acres, with dense growth of alders and tamarack.
Near North Bloomfield, Muskingum Co., Ohio, formerly a great
pigeon roost. C. every culvert was loaded to its utmost capacity.
French, p. 177. Henry M. Shreves. "William Collins, an veteran Pennsylvania Railroad employee at Altoona, has related in a bulletin issued by the railroad, that on a certain occasion in the '70's, the wild pigeons were so numerous in the country between Kane and Sergeant, Pa., that they broke down the railroad telegraph line for a distance of eleven poles by lighting up and flying against the wires. The birds kept the line out of commission for several days."


Correspondent. "Pigeons roost." Penny Mag. 6 (1837) 4-5.

Penn. and N.Y. "Throughout the whole of the Alleghany there are low and swampy pieces of ground designated 'Beaver Meadows.' These swamps, in the most part, are overgrown with tall coarse grasses, and around many of their margins grow a profusion of elder bushes, seldom attaining more than fifteen or twenty feet. Why are therefore the pigeons select these bushes for their roosting places might be somewhat difficult to conceive, since the forest trees in the immediate vicinity would afford them much greater security; but such is the case at present, and such it is known to have been.

... the number of pigeons that roost in one of these "alder swamps," upon which they chance to fall as a result of rain or snow, surpasses all belief. There are thousands and tens of thousands, and in some cases hundreds of thousands, and they are therefore so closely stored together that they support and rest upon each other. Can being attacked by men with torches and clubs; they move to and fro, they flutter, but
do not attempt to quit the bushes, seemingly determined to retain possession of their roosting-place regardless of consequences... It is exceedingly strange that among the thousands of pigeons taken in the manner here described, there never happens, by any chance, to be any old birds! As soon as the second broods are capable of accompanying their parents in their onward journey to the far regions of the north and west, they all as with one accord leave this section of country; for by this time their favorite food - the beech-nuts - is quite exhausted.

Anbury, Thomas. Travels ... London (1787) Vol. 1, pp. 164-5; 
Takes Champlain June 23, 1777. "... the last grains, which the pigeons roost on..."

Anon. F. H. S. 3 (Oct. 15, 1874) 158. From Piedmont (W. Va.)

Independent. "Huge roost at Oakland, Morgan Co.

"Birds are piled... thick on the elder bushes."

Behr, H. Recollections of the passenger pigeons, Cassinia 15-
(1911) 29-7. Pigeons that summered in Sullivan and Wyoming, ex. Pa. fed in the elder sumac. [Young only?]. "Towards evening they sought not thick clumps of hemlock or spruce trees, ten to twenty-five feet high, and spent their nights there.

As frightened feeding flock. The noise of the frightened wing was tremendous, and the disturbance created in the wood floor resembled the effects of a small Hurricane. Deared and dead twigs were sucked in their wake and whirled haphazard in all directions."
Roosting during nesting.

French p. 31. Old birds nested in tops of nesting trees. p. 56.
Same statement by C. W. Richardson (?).

p. 67. C. W. Richardson: "the males roost in the nesting or in
adjacent trees."

Fountain, Paul. The great north-west (1904) p. 217. "... but
the cock, who feeds them on the nest, does not roost in the
tree with her, or on trees at all. Strange to relate, the cock
goes nightly to the juniper - wagon, and roost on the branches,
within a dozen or fifteen feet of the ground, brushing down
the branches by hundreds as I have myself witnessed."

p. 218. Besides junipers, other bushes, especially alders are
chosen.

Hammond, S. H. On Seasons, N. R. sketches of Franklin Co. [N. Y.]
(1913) p. 213. The nesting near Tupper Lake in 1853.

"The great limbs of the trees outside of the lodging place
were broken and hanging down, being unable to sustain
the weight of thousands that perched upon them."

Thompson, G. Reminiscences of a Canadian pioneer...
(1884) 76. "The pigeons roost [nesting] itself was a marvel.
Men, women and children went by the hundred, some
with guns, but the majority with baskets, to pick up the
countless ribs that had been disabled by the fall of great
branches. If trees broken off by the weight of their roosting
companions overhead."
Rosining (on backs)

Farr, W. Memorable Days in America: ... (1828) p. 248.

"...they rest on the high forest trees, which they cover in the same manner as bees in the honeycomb, covering each being piled one on the other, from the lowest to the highest, some of the lowest branches, which are laden, are constantly continually bending and falling with their crashing weight, and presenting as scene of confusion and destruction, too strange to describe..."

Schoenar, unpublished manuscripts J. Calvin Mather...

Curk 65 (1938) 473. "At their lighting on a place of thick woods, the front wheel'd about, the flanks wheel'd inward, and Rear came up... and pitch'd as near to the Center, as they could find any true, or Thing, or Bush to seize upon. Yea, they sat upon one another like Bees, till a Limit or a Tree would seem almost as big as an Horse..."

"Subscriber" (1832). Alighted on alighting place 2 ft 3 deep.
Kalm, Peter. A description of... Arch 28 (1921) 57. Root near Phil., in March, 1740. "The big as well as the little trees in the wood, 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. Parks, quite about a yard high."

Johnson, Evan. A pigeon story of the early days. Wis. Hist. Bull. Vol. 3, no. 3, June, 1921. Root in Knapp's Creek valley, Richland Co., Wis. in April 1941. Broke off all the large limbs on the tree on an area 2 miles wide by 6 long. "There was scarcely a limb to be seen but that the pigeons were piled on its from three to seven, eight, nine on ten, or twelve on one another. Killed 5 to 13 at a shot with a rifle."

Audubon, Vol. 1 (1831) 324. "The pigeons, arriving by thousands, alighted everywhere, one above another, until solid masses as large as house tops were formed on the branches all around."

Waterston, Charles. Pigeons. London's Mag. Nat. Hist. 5 (1834) 274-288. "The pigeons, continues Mr. Audubon, arriving by thousands, alighted everywhere, one above another, until solid masses as large as house tops were formed on the branches all around. Solid masses! Our European pigeons, in a similar situation, would have been all squashed in less than three minutes. Mr. Audubon informs us towards the end of his narrative, that the feathers of this pigeons fell off at the least touch. From this we may infer, to a certainty, that every pigeon which was eminently enough to be undermost in the solid masses would lose every feather from its uppermost
parts, through the pressure of the feet of those above it. Now, I should fairly believe that instinct brought these pigeons to resort to a certain part of the fruit solely for the purpose of repair, and not to undergo or permit inevitable insufficiency, and, at the same time, to have their beaks deprived of every feather, while they were voluntarily submitting to this self-inflicting method of ending their days."

p. 552. Waterloo to George Wedg., July 3, 1836. R. C. Anderson:
"He is, indeed, an ardent foe!"  Life in the Waterloo was a continuous jest. Suffered from real or fancied wrongs dating back to Queen Mary.

Coles, E. Key.... Vol. I, p. 37. "Pigeons are peculiar, among our birds, for the very loose insertion of their plumage; you will have to be particularly careful with them, and in spite of all your precautions a good many feathers will probably drop."

Craig, W. Recollections of the Pigeon in Captivity.
Sand-Lake, 16 (1913) p. 96. "The old accounts tell us that in the weeks events some pigeons alighted on the backs of those who had found peril; but this was probably only temporary, and for lack of room, and I am sure they did alighted on must have entered it with angry voice and a struggle to throw the other off his back."
Roosting (on banks). Masses, Canton, p. 23. "Of these there come in Winter to Virginia, Accord, and Carlisle, from the North, incredible Numbers; in some places when they roost (which they do on one another's backs) they often break down the limbs of Oak, with their weight, and leave their dung some inches thick under the trees they roost on."

"Roost." Chicago Field 12 (Nov. 27, 1877) 250. Little Rock, Ark.

"...come to sand bars to get sand. They sometimes congregate so close together in lighting on the bar that they are three feet deep, and a few get their wings broken, so the little meagre go out and catch them."

Burnaby, Rev. Andrew, "Travels through the Middle Settlements ... 1759 and 1760. (1798) 101. "Towards evening they generally settle upon trees, and sit one upon another in such crowds as sometimes to break down the largest branches."


"...an incredible Number of wild Pigeons assembled there every Night for a Month together, in a small District, pecking manifold upon one another, so as by their Weight to break down the largest limbs of Oakes, bending the Taper of altars to the ground, which was covered more than one foot high with their dung. The ruins of the Wood as well as the remains of the dung could be seen several years after."

Amos Wild pigeons roost in Maryland. Ann. Sportsman 2 (Dec. 1872) 42. "...one to two feet deep in elder thickets."

The Captain. Pigeon shooting in the early days. F. & S. 68 (April 27, 1907) 656-7. "...often momentarily settling on the backs of those already in possession."
Rotating (on backs) — Mesilla.

Hildreth, S. P. Flight and increase of pigeons. Bull. Am. Sci. 24 (1833) 135. "When a tree is filled, the pigeons still continue to accumulate upon the branches of each other, until the branches or the whole tree give way; when they seek a new spot, to repeat the same thing. In the night, a great many are taken by hand from the lower branches, on which they alight, when forced from the higher trees."

Barde, F. S. [Pigeon roasts] 1912 Ann. Rep. [Oklahoma] State Game and Fish Warden, p. 110-1. "Struggling for a place to alight, the birds dropped onto each other's backs in the greatest confusion. As their number and weight increased, the branches would bend until finally they broke with a loud snapping, and the flitting pigeons went whirling into the air."

"When the pigeons passed in the early morning to their feeding grounds, they flew low over the surrounding ridges, armed with stout hickory clubs about eighteen inches in length, these Cherokee boys hid themselves until the flight was close at hand. Then they threw their clubs with all their might. The pigeons, nearest at hand, startled by the suddenness of the attack, sought to turn aside, which instantly caused a holocaust so swiftly more than other pigeons following. At this struggling mass of birds, the boys hurled their clubs and brought down large numbers."

Fawc. Memorable days in America (1823) p. 248.
Shooting.

Childs, John T. Personal recollections of the passenger pigeons. Waterlow 1 (1905) 71-3.

Buckfield, Oxford Co., Me. In Aug. 1867 several thousand appeared and fed on the ripening buckwheat. "The birds could often be approached while feeding upon the ground. They would also settle upon the rail fence which enclosed the buckwheat field covering the rails so completely that they looked like a chain of living birds, and by taking a position where we could fire at them 'in the air,' as the natives called it, 8 or 10 might be bagged at a single shot... When first at the flocks would settle upon two or three immense elm trees which grew near the river, covering every limb so densely that there did not appear to be room for another bird. At times they would fly to the hill back of the house and alight sometimes upon the ground and sometimes upon the trees of the wooded portion." Stayed 2 or 3 weeks during which time about 1/2 of them were killed.

"I once heard an old settler tell... that a common way of killing them off was to dig a long trench in which a quantity of wheat was scattered to attract the birds. When they came and settled down to feed, filling the trench to its utmost capacity, the discharge from an old flintlock musket loaded with a handful of shot would often result in the killing of as many as 75 birds."

Observer: Shooting wild pigeons. F. 45. 3 (Oct. 15, 1874) 146.

We and a companion shot about 150 pigeons at the root at Beech Park, Md. fall of 1874 and left them as they had no means of transportation."
Butler, Amos W. *Birds of Indiana.* (1878) 761. When a roost was shot into the birds arose in mass and then settled down again.

Brewer, Charles. *The Pigeon.* J. Linn. Soc. Nov. Sect. 21 (1910) 53. When the birds were silent or feeding was a favorable time to slip up within shotgun range, which could be done by hiding behind a tree trunk, but if one bird took the alarm and flew up, the entire flock was sure to follow.

Trumbull, R. Memoir of his own life. Dublin (1811) 167. June, 1777. During this migration of the pigeons the Canadians take much pleasure in shooting them, which they do after a singular manner. They erect ladders from the ground to the tops of the pines, on which the pigeons roost by night in quantities. Coming softly to the trees they fire up in the direction of the ladder as fixed, and succeed in taking down the pigeons in numbers, when striking a light they collect the killed and wounded birds around the place.

Green, C. A. (Rochester, N.Y.) F. 45. 81 (July 19, 1913) 76. I had learned to string these pigeons on a forked stick by thrusting a sharp end through the soft flesh beneath the under beak of each bird.


"They seemed to have a preference for pines and in hunting Pigeons I recollect we always searched the pine woods carefully."
Thomas Antonio. "Travels through the interior parts of America." N. Y. Vol. 1 (1823) 164-5. "Canadians find great amusement in shooting them, which they do in a very singular manner: in this day time they go into the woods, and make ladders by the side of the last piles, which the pigeons roost on, and when it is dark they creep softly under and pick up the ladder, killing them in great abundance." Flights last three weeks to a month.

Anon. "Note on decoying wild pigeons in New England." Silliman's Ann. T. Science 16 (1829) 373-4. Use of flight and stork pigeons as decoys. The pigeons alight "in a long pole, raising a little from the horizontal line, so as to give the greatest effect to the discharge of the gun from the high house which conceals the sportsman."

Taylor, James. Narrative of a voyage to, and travels in, Upper Canada." Mill (1846) pp. 82-3. Soldiers & a garrison on Lake Ontario discharged a cannon loaded with grape-shot into a flock of pigeons and killed hundreds.

French. p. 56. "The blast of the flukes made their feathers wave in mail, impervious to small shot; their heads alone were vulnerable, in a flock coming towards the shooter. Those who shot into the rear of the birds that had passed them, killed many birds which were usually precipitated into fields & the farmer beyond, or into brush and briars far away, so many dead birds were never found, for they fled away, in their death struggles."

Author. With bow and arrow... F. 98, 14 (Feb. 5, 1880) 14.

During the huge nesting in Cattaraugus - Erie Counties in 1823, all the Indians from the Buffalo, Cattaraugus,
and Alleghany reservoires came to get agate, shot them out of the nests with blunt-headed arrows. Excellent shot.

Clarkesly, p. 233: "in their passage the People of New York and Philadelphia shoot many of them as they fly, from their Belonies and Tops of Houses."

Charlevois, I, p. 243: "these birds may be said to seek only an opportunity of being killed, for if there is a

naked branch upon a tree, or that they choose to perch, and sit in such a manner, that the most inexperienced
gunner can hardly fail bringing down at least half a dozen at a single shot." Montreal April 22, 1721.

"Receipt." Among the pigeons. Turkey, Field and Farm. (Sept. 16, 1870) p. 161 & 177. "Announce flocks going southward near Greenwich. Used no. 8 shot. Poles or crotchets set up in line with a cedar line. Decoy used to cause pigeons to alight on poles from which they were shot.


"Pigeon mornings were the cool, first mornings of late September and early October. To the top of the highest trees on the

summit of the low hills east of New Haven long poles were fastened at an angle of about thirty degrees from a perpendicular and near the base. I have trees laths & leafy branches were built in such a position that the hunter hiding within could rake the pole with a discharge of his gun. The migrating pigeons would alight on these poles, and great numbers were often killed in the early morning hours. Such pigeons amateur Esq. B. well remember seeing often in the seventies... after stopping for a few minutes on these hills they would fly to the salt marshes of Quinnipiac."
Sand Jack, "Chicago Field 12 (Nov. 29, 1879) 250. Little Rock, Ark. Pigeons come to sand bars "every second morning" to get sand. See under Arkansas.

Ballard, Ralph. Passenger pigeon recollections, Jack Pine Warbler 24 (1896) 135. From Niles, Berrien Co. Mich. old newspapers. Rec 4, 1839. "Mr. Henry Kent recently shot at 18 shots 7 89 pigeons. They were on a sand bar where they had alighted for gravel and water." (Niles is on St. Joseph River.)

Campbell, R. R. Hunter's encyclopedia. [1948], p. 264. Under long-tailed pigeon. "There is a daily intake of gravel into the gizzard which helps grind the food swallowed whole. ... There is no true digestion with the forming of digestive juices."


Irving, Washington. The virgin journals ... (1944) p. 155. Nov. 11, 1832. Verdigris River, near Fort Gibson, eastern Oklahoma. "... pigeons in clouds, some rising from the sand bars where they go to drink and pick gravel;"

p. 157. Nov. 12, 1832. Arkansas River, western Arkansas. "... immense flocks of pigeons on sand bar in the river."

Most plentiful.

Sand


"We caught the most on gravel beds along the rivers.
Canadian" as they would settle down for stones to put in their crops to quind up the ocyres."


50 (1934) 15-9. "All the fruits mentioned with considerable.
Coarse sand or fine gravel were found in the stomachs.
Of these birds when cleared for the eating pot."

...contributed by Edward H. Bowers, Bungie Co, which describes a salt spring discovered in 1870 and much used by settlers.

...at the head of Frankfort Harbor which is formed by the widened mouth of the Betsie River, is an extensive marsh, at the head of which, in the cedar binteger is an open space about one hundred feet in diameter, called the Salt Spring, where brackish water rises, which, in time has formed a sort of mound, a foot or two high and thirty or forty feet in diameter, covered with a thin growth of grass. During the nesting season, this spot is visited in the morning by countless numbers of pigeons. At day-break, a single bird appears from the nesting, some miles distant, to reconnoiter and, after circling around a moment disappears. In an incredibly short time, the birds begin to come, first in small numbers, then increasing rapidly, etc.


...when they fed on acorns they would eat salt like sheep, but when feeding on acorns or grain they would take no salt.
Salt.

Raffet, Father. Relation of 1671-72, Jesuit Relations 56(1899) 49.

Miessgin, Saint Yves or Attoconni, N.Y. "Many enemies are not likely for catching pigeons, from seven to eight hundred being often taken at once."

Schenck, J.E. Pigeon in N.W. Penn. Cardinal 5(1939) 40. J.R.

Aristotle: "During the second half of the season, the pigeons were met with often by salted mud in the woods. Salted mud was used because of its peculiar attraction for the birds. They liked it as well that they would bury their heads in it, and the whole bed might be covered with pigeons, their tails pointing skyward.

After preparing a bed of salted mud, the settlers could catch the pigeons at once. For the woods were so full of flying birds that they could be readily attracted by a stock pigeon."


When pigeons came strongly to the bed, a barrel of salt (280 lbs.) lasts about four days. Net 15 x 30 feet.

Lewis, Elizabeth T. Orch 61(1944) 589-90. Re used salt by pigeons quoting Aristotle, Pliny, Harvey.

Pennant, Thomas. Arctic zoology. 2 (1785) 328. Ashton Blackburn: "My plant poles for the Wild Pigeon to light on which they come on landing (as they term it) which they do every morning in the season, repairing to the marshes near the sea-side."

Kalm, Peter. A description... Arch 28(1911) 64. In August, 1750, he noticed with astonishment here a large flock of pigeons were of the salty earth at the salt springs of Amontego, N.Y. Trapped and shot by the Indians."
Salt

Whitman, Pigeons 3 (1910) 195. "Salt (rock) is very necessary, as isgultry-fish, bone and ground oyster—shell."

Marshes, N. B. The p. pigeons (1907) p. 286. Eragone: "Certain it is, while feeding their young they are frantic for salt. I have seen them pile on top of each other, almost salt springs, two or more deep. I wonder if your friend gives his birds, while breeding, salt?"

Anonymous, Topography and history of Rochester, Mass., 1815. Mass. Hist. Soc. Colls. 4 (1846) 256. "Some of the peculiarities of this bird; it is said, are to visit marshes for mud, very early in the morning, ... This habit is well known about Medford, where they are caught on the marshes by live pigeon decoys." They leave the sea coast by 8 or 9 A.M.

Audubon, W. (1831) 325. "I have seen the Magpie at the United States' Salines or Saltworks of Stawance Town, named with killing pigeons, as they delighted to drink the water issuing from the leaching pikes, for weeks at a time."

Cuvier, St. John de Seale, 18th century.

American, New Haven (1925) p. 111-2. He thinks they visit us "only in their progress towards the sea in quest of salt. For during their abode with us two or three times a week they regularly take their flight towards its shores, and as regularly return in twelve hours, except they are caught by the inhabitants of these countries."
Salt & Salting Beds.

French, p. 269, 227, 228, 243, 5 (1919)
Pellic Kahn, Calk 28 (1911) 53-66.

[Small, Henry Beaumont], "A Canadian handbook and tourists guide", Montreal (1867) p. 97. It is said that the medical properties of the water at the Caledonia springs on the Ottawa P. were discovered by "pigeons flocking in large quantities to them." This land having a well-known penchant for any salt.

Clinton, De Witt, N.Y. Med. Phylo. J. 2 (1823) 216-5. "it wants to the sea shore and the salines of the earth for salt, and it is frequently seen at the mineral springs of Saratoga enjoying the luxury of the waters."

Behrside, Charles F., "The yesterdays of Grand Rapids", (1922), p. 137. "A favorite stopping place with them was at the salt meadowes, below the west side plaster mills. The water there had a slightly salt taste, very agreeable to man, and seemed much liked by the birds... I have seen a hundred acres densely covered with flocks going and coming about the marshes."

Ashe, Thomas. Travels in America, performed in 1806, London (1808) pp. 49-58. "The salt lake and springs [Omondago] are also frequented by all the other kinds of beasts, and even by birds; and from the most minute inquiries, I am justified in asserting that their visitations were periodical, except doves, which appear to delight in the neighborhood of unpeopled springs, and to make them their constant abode. In such situations they are seen in immense numbers, as tame as domestic pigeons, but rendered more interesting by their solitary notes and plaintive melody."
Salt

Brown, Edward E. The history of Wells and Kennebunk [Maine]. Portland (1875) 563. "... and daily the pigeons took their morning flight to the sea for salt; ... vast quantities were killed in the marshes."

Merchan, W. B. Pigeons (1907) 109. From Henry T. Phillips:

"I knew a man paying 300 for the privilege of netting on one salt spring near White River [Mich.]. It was a spring dug for oil, boarded up sixteen feet square, 200 feet deep. We cut it down as little and built a platform, and caught once or twice a week. We got 300 doz. at one haul in this horse. He said they were piled there three feet deep."


"Drake [Albemarle] (Albermarle), N.Y. Salt springs south [i.e. July, 1656]. So many pigeons collect around the salt springs in spring that sometimes as many as seven hundred are caught in the course of one morning."
shooting

M. Still pigeons. F. & S. 18 (July 27, 1882) 507. Baltimore, Md. July. "I have been keeping my hand in during the off season by practice at the wild pigeons... during within range by effigies set up on the fence rails."


Milne, A. P. Side-hunts. Forest and Stream 35 (Jan. 8, 1891) 497. Wild pigeon counts 20 in the list of the Palmynar, N. Y. Forest and Stream Club. [Does not show that a side-hunt was held.]

"Barney." An old-time pigeon shot. F. & S. 46 (April 6, 1893) 295. States that in night shooting he has killed 61 pigeons by discharging both barrels.


On April 14, he reported that two good shots killed, on the wing, about 1200 pigeons in ten days near Erie, Pa.


On Thursday L. J. Last, Seth Green and Alfred Hubbell shot and brought home 991 pigeons. They killed about 200 more that were picked up by boys.
Shooting Robinson, Rowland E. Uncle Wick's outing. 1st ed. (1897); Rutland, Vt. (1934) p. 117. He fired into the thick of the flock, and four birds tumbled out of it. He string them through the under mandibles or two of the long tail feathers tied together at the tip..." Schuyler, Unpublished manuscripts by Cotton Matthe...

Creek 55 (1938) 473. "An if my Neighbour has killed no fewer than two sixty fowls at one Shot.


"The old Gentleman was concluding his story of killing the bear, when his daughter Alida in and told her father there was a large flight of pigeons just alighted below the house. Upon this, we all charged our pieces, and coming very near them (no less than fifty or a hundred in the flock), we agreed to fire together, when just upon the wing. At the first fire, with five guns, we brought down sixty-two. They alighted again at a small distance, and the second time we shot eighty-five."

Williams, Alida S. Personal recollections of the Pigeons. Creek 51 (1934) 161. "We frequently gathered upward of seventy pigeons at one discharge of the gun, but I have heard my mother say that she once saw him bring down 124 birds at one shot..."

"Father never came to breakfast... until he had bagged from 1000 to 1200 Pigeons.

The early spring flights were in close formation; later, as they became wary in open formation so that a shot did not bring down very many.

p. 162-3. "It was amazing how low the birds flew, particularly..."
the young men, after clearing the forest they dipped low over the pasture, then rose sharply when they reached the top of the hill, barely clearing the heads of the timbers. So low were they when they reached the crest that men, boys, and even some women and girls got quite a few by throwing clubs and stones at them."

p. 162. "But when the young were strong enough to fly the slaugther began. Flying in exclusive flocks the fledglings came over the trees closely banded together and the first shots instead of scattering them threw them into a scatter, where they linked to find safety in close companionship. I have seen a flock of hundreds of inexperienced birds fly up the hilltop and meeting the barrage of guns, scatter, swirl, turn and pass the entire gamut of the line thus exposing themselves twice to the attack, and return whence they came. Of twenty-five individuals survived the double onslaught they were lucky."

To: Old days in Maine. F. 45. 39. (Aug. 11, 1892). 117.

"The figixm had a habit of coming to the salt marshes for a drink of salt water about sunrise, as there were no trees for them to alight on, as they wanted to do before going down to drink, we used to put up what we called a rafter; which was a hole set in the ground with another across the top with slats for them to alight on. ... The top pole was put in such a position that a gun fired from the blind would make its "fore and aft." The figixm would frequently come in as large a flock that the makers would not hold them. As many as could alight, the rest would flutter for a moment over those already alighted, when the old King's arm would break and down they came. I have known 100 [killed] as the result of two shots."
Shooting. "Teaching Pigeons by Telegraph."

"To Carew (Wis.) Evening Democrat June 1, 1871. "On the west
the birds do not fly in flocks, as is generally supposed,
but are scattered, and fly in and out more like
mosquitoes, so that it is very hard, although there seems
to be millions of pigeons around, to kill large numbers
at one shot."

Moore, Ralvern A. The Lander J. Keiminen... Heardi.
Dampman. 73(1928) 106, 140. "It was much easier
to bag pigeons when they were feeding than it was to
shoot them in the wing... the usual method was to
use a double barrel shotgun with No. 5 or No. 6 shot.
The pigeons came with such terrific speed that their
feathers were pressed flat and a shot striking the body
would be deflected. Very few pigeons could be killed by shooting
directly into the flock as they came towards you. The better
plan was to let the flesh pass over and discharge the shotgun
in their rear."

Snap shot. Peace and pigeons in Wisconsin. Spirit of the
Times 12 (May 27, 1865) 194. "Kessably I like the
pigeon and old wounds on birds shot. See Ms. Wis.
"Snap shot." Autumn game grasp. Bid. 15 (Oct. 20, 1866)
129. Description of evening shooting in fall. Ned
his stand in an open piece of ground, that makes
a short break in a line of timber. Shot them also
when nearly pitch dark.

Tabor, R. H. Wild pigeons. St. Michael 42 (March 1915) 468.
Red Wing, Minn. The father "went up to the [Sioux] chief a short
distance up the river [Miss.] to a point, that for many years, was
celebrated as the Pigeon pigeon-fowl in the west."
Shooting

Nelson, George. Travels through the Canadas (1807) p. 518. "Shot, if fired as they approach, will seldom make any impression on them; the only certain method of bringing them to the ground is by firing immediately as they pass."


"It was pathetic to see the efforts of the comrades to wound a pigeon to support him in his flight. One after another would dart under the stricken one as he began to sink, as if to buoy him with their wings. They would continue these efforts long after he had sunk below the general line of flight, and not until all hope was lost would they reluctantly leave him and rejoin the flock.

"The mind of the flier and the aid of his comrades would frequently carry a bird hundreds of yards beyond his slayer after he had received a mortal wound." Experienced hunters never shot into an approaching flock, but waited until the birds had passed.

Reid, John, Madame Frederica C. T. Letters and journals relating to the war of the American Revolution. Albany (1867) 85-6.

I learned he was what is called a Pigeon-shooter, and had subsisted entirely by this employment for nearly forty years. I selected an open, very high, flat ground. On three sides of the hut were erected four or five poles, twelve feet high on the summits which were placed like flutterers, eyes screwed up, and fastened by a string about three feet long. The tops of the poles also communicated with the hut by means of strings. When a flock appeared he pulled the strings and up went the fluttermers. (Not clear how they returned to tops of poles.) Opposite the hut, and at a distance of about four feet, was a pole six inches in diameter, and about twenty feet long, inclined a little upwards. [What means that pole was 4 or from ground? Musket loaded to the muzzle.]

When a flock appeared "the old fellow fell to praying," i.e. imitating the cry of the wild pigeons, which experience teach taught him to do to perfection: in a few minutes, the whole flock, which perhaps being headed the other way, would instantly wheel round, attracted by the old man's praying, and the fluttermers fell asleep, and in a moment a whole flock would settle upon the whole length of the pole two or three deep. He emptied their fire the moment they alighted, and swept the whole off. Sometimes killed 12 doz. at a discharge. Another flock might not appear for hours or again the whole day.

Pigeons sold at 50 cts. doz. and feathers at 1 1/2 cts. The pigeons appear in great numbers the end of August, season lasted about 6 weeks during which he averaged $4.00 a day.
Shooting

[Pratig fume jante: idle chatter; boasting; meddlesome talk. Middle Dutch and Middle Low German jàten].

Thompson, Samuel. Reminiscences of a Canadian pioneer. 1884, 75-6. Township of Sunnemadale, near Locke Station.

Pigeon are swiftly, that awan-shot failed to bring them down unless striking them in rear; and, even then, we rarely got them, as the velocity of their flight outflew them far into the thicket before falling.

"I have known twenty-five pigeons killed at a single shot; and have myself got a dozen by firing at random into a maple tree on which they had alighted, but they not one had been visible."

Kalm, Peter. A description. June 28 (1711) 64. In Aug. 1730, the Indians at a single discharge would kill 50 or more at the salt springs of Cronoldo.

Muhlen, W.A. New p. pigeon. p. 8. When we are ready to carry our birds home, we pull out the four long tail feathers and knot them together at the tips. Then the quill ends are stuck through the splotive part of the lower mandible and the birds are strung together eight or ten in a string. These strings are bundled together by tying the quill ends of the feathers, and we have our game stowed in compact shape for the triumphal march homeward bound."
Shooting

Post, Charles. Area. Roane Corners. (1930) 111. Shooting pigeons along the lake shore, Cleveland, Ohio. "Here the birds flew low [near Doan Street] and the shooting into the flocks at times so confused the birds that they [2] lighted in the low trees and at times even on the wagons and the backs of horses hitched there. The birds flew east and west.

Pennant, Thomas. Arctic zoology. Vol. 2 (1785) 325. Ashton Blackburne: 1776. Shooting pigeons from 'polis' as they go to the salt marshes. "Sir William Johnson told me that he killed at one shot with a blunderbuss, a hundred and twenty or thirty."

Schultz. C. Travels in an inland voyage... 2 (1810) 118. One evening in March, 1808, below the mouth of the St. Francis River, Arkansas, pigeons passed so close, in 'innumerable flocks,' that their eyes could be distinguished. They were so near that the pigeons shot did very little executive their failure to scatter.

Tom Thumb. A pigeon shoot. Red & Blue 8 (June 8, 1876) 149. Shelby, Mich. meeting of 1876. "After three flights out [from nesting] it would continue without a break, in the string of birds across a favored point, for an hour or two, and all one who wished to shoot had to do was to sit down in some small clearing and shoot until it became monotonous, as there would be no lack of birds. Shooters who put in the day, would secure twenty-five to thirty dozen to a gun; the shooting lead to be done on the wings, though fine shots were presented in the woods where large lots
of birds were feeding. By screening one's self in the direction of the birds and waiting until they worked up to you with their never ceasing noise, as they fluttered one over the other in search of food, eluding one you would have a solid mass of birds to fire at as far as your shot would carry. As they thundered up from the ground, two or three dozen more several times killed at a double discharge; but this was mere slaughter of the innocents.

Strickland, Twenty-seven years in Canada West, 1 (1853) 299-300. "Directly after the wheat is carted, the pigeons alight on the stubble in vast flocks. As they are chiefly young broods, they are very easily approached; the sportman should creep up behind them; for they are so intent on feeding, that they will seldom notice his approach till he is within fair range of them.

The hindmost rank are continually rising from the ground, and dropping in front of the others. This is the proper time to fire, for as the hind ranks are a couple or three feet from the ground; firing the second barrel as the whole flock takes flight.

Robertson, Norman. History of the County of Bruce [Ontario]. (1906) 79. "It was useless to fire a shot at the flock as they came toward you, as the shot glanced off the thick shield of feathers which covered their breasts. The sportsman must wait until the flock were a little more than abreast of him before pulling the trigger."
Sitting


"The wild cherries are, while they last, eagerly sought by the pigeons, and large bags are made by sitting beneath these trees and shooting at the incoming flocks."

"At this season of the year the Alleghany Mountains are literally alive with them, consequently every one who can procure a gun takes his path to wage an indiscriminate war upon the poor pigeons that have visited the hills and valleys to feed upon the acorns and wild cherries which are found in the greatest profusion on the tops of the Alleghanies in a strip of country called the Bledes. These Bledes are open spaces devoid of trees in the midst of unbroken forests covered by tall grass and alder bushes. They extend for perhaps fifty miles on lot of the mountains, and are from fifteen to twenty miles in breadth. This section of the country seems to be the favorite ground for pigeons in the fall of the year."

Byrd, William. The secret diary of William Byrd of Westover 1709-1712. (1941) P. 347. May 22, 1711. "Mrs. Mumford cut my young horse and then I set out and shot wild pigeons with bows and arrows..."

Reulach, S. M. Pigeons now and then. EYs. 78 (Aug. 7, 1909) 212.

"Nestling at Kinzua Bridge, Warren Co. Pa. [ ] " There were about 800 Seenee Indians and 500 whites at this slaughter. The little Indians set to his years old often fagged more squeak then their parents, two of them going together with a bow and large headed pine arrows. He would shoot at the bottom of the nest... the arrow would throw the pigeon up twelve to sixteen inches. They would open their wings and come down four at one side of the nest, but close to a little Indian who would swing its neck, remove its crop and place it in the sack with the rest, when it was worth twenty-five cents per dozen."
Shooting

Anon. Relation of 1662-63, Jesuit Relations 48 (1899) 177. St. Lawrence River. One man killed 132 pigeons "at a single shot."

Ebbingwell, W.B. Shooting on Upland... (1890), p. 220 (C. Fulton) Tyone, Iowa. "... the birds separated at each report, and quickly came together again, screeching from the spot where the ascending smoke was, or at times turning completely around, and then advancing by another route." Describes, pp. 227-9, shooting from poles set.

Pautz, W. Memorable Days in America... (1823), p. 174.

Hannsville, Ohio, Oct. 14, 1819. "I wandered in the fields shooting pigeons, which is here fine sport; they fly and light round you on every tree, in immense flocks, and seeming to court death by the gun, the sound of which appears to call them together, instead of scattering them away; a bowling-piece well charged withduct shot might bring down a caskful of these willing game dead at your feet."

Anon. The great pigeon nest. N.Y. Herald July 4, 1874, p. 3.

Nestng at Frankfort, Benzie Co. "The beach at Crystal Lake, where the waters were lowered last year, affording a sheet of level land some twenty-five miles round and nearly a half mile wide, is thickly dotted with the stumps of timber — small bits of pine boughs... At times poles are placed for stakes without and decoys employed to induce the birds in to come and be killed as making discharge sweeping them from the poles literally by dozens."
Shooting Matches


Editor. N.Y. World. Tues. July 30, 1878. Editorial against the shooting of pigeons from traps at the sea last Saturday.

No data.


In the East State Sportsman's Convention held in this state (N.Y.) 12,000 were trapped for it and at the same time 7,000 were in crops at Syracuse to be shot at a week or two later. At times there are as many as 15 to 20,000 in crops at Chicago.

Rough, E. Chicago and the west. F. & S. 35 (Sept. 18, 1890) 169.

Chicago, Sept. 13. "Lake George Club had a brace of wild pigeons last week, but did not shoot them at the trap."

Harvinger, R. P. A. Echoes from the backwoods. Vol. 1 (1894) p. 128. "They have a long wedge-shaped tail; and, if the ends of it are cut off, previously to putting them in a trap, they are so as stunned at the moment they attempt to fly, that they go off quite as game as the best blue rock pigeons in the Red House's celebrity."


"We used to buy them for help shooting at about 70 per thousand, but after 1886 they were positively unobtainable.

"At the big shoot, which occurred in Cleveland in 1873, we used 15,000 wild pigeons."

Martin, Edward T. Confessions of a market shooter. Outing 63 (Dec. 1913) 376. "The demand from clubs increased the destruction of pigeons at the Michigan meetings of 1876 and 1878, for both years when the catch was best".
not pay cost of the barrel and ice used in shipping and had there not been a good demand for live [birds], necessity
must have quieted and gone home." Swails sometimes used
for shooting when pigeons were difficult to obtain.

p. 378. From Aug. 15, 1868, to Nov. 1, 1908, he killed
27,378 pigeons from shooting.

Stagg, Tom. Lots of birds. Chicago Field 9 (June 22, 1878)
298. An advertisement stating that he had 23,000
birds in coops in Chicago, in splendid condition
and ready for the trap. Full state shoot at Red Meeting,
Omaha, will be supplied with 5,000, and Kansas City,
5,000.

Chicago (Ill.) Daily Journal June 12, 1849. "Pigeon
shooting." Mention of shoot on Saturday, June 9.
"The birds were wild pigeons, caught the day
previoux, and most of them flew very well."
Chicago Daily Journal March 12, 1860. "Large flight
for part two or three days."
Myriads of pigeons have filled the air for a day or
two, south bound..."

Editor. [New York State Tournament] F. & S. 6 (June 1,
1876) 273. At the State Shoot at Benesco, N.Y.,
last week N and P plunge trips were used. "There
were ten thousand pigeons on the ground, brought from
Michigan by Mr. Knapp for the purpose."

Shooting Matches

[Thomson, W. P.] Millions of wild pigeons, N. Y. Sun. Tues. June 14, 1881. An Saturday night a car containing 8,500 pigeons arrived at Jersey City, shipped from Cohoes, N. Y. They are first of a shipment of 20,000 which W. P. Thomson, Phillipsburg, N. J., contracted to supply to the N. Y. Sportsmen's Association. He will get four more carloads from the end of TCR, making a total of 40,000 pigeons.


Brandon (Wisc.) Times May 31, 1871. Pigeons will be shot from a T trap.

Janesville (Wisc.) Gazette July 20, 1882. Convo 3000 wild pigeons have been secured for a shoot at Janesville July 25 & 26.

La Crosse (Wis.) Evening Democrat June 1, 1871. Tracking pigeons by Telegraph. A 10,000 pigeons shipped from Milwaukee to Buffalo by water, "about eight thousand arrived in good condition on the shooting grounds at Alice."

La Crosse (Wis.) Democrat June 15, 1882. La Crosse County Trapper has furnished 2000 pigeons for the shoot tomorrow. "Birds were very young, many of them not able to fly at all."

Milwaukee Evening Wisconsin July 15, 1882, p. 8. No shoot July 3-6. "At the pigeon tournament the heads of wounded birds are quickly removed and they are allowed to remain in the water until a short time, thanks to the watchfulness of the Humane Society agents."
"Shooting Matches."

Wisconsin, June 17, 1862. [37.] "Birds secured in Wisconsin. Buffalo Commercial, of the 13th, states that the Monroe County Sportsman's Club has received 1500 pigeons from Monroe, Wis., for the state shoot in Rochester next week.

Beloit (Wis.) Free Press Aug. 9, 1873. "At the pigeon shooting tournament in Jerseyville, Ill., on Wednesday, August 6, Capt. A. H. Bogardus ... accomplished the extraordinary feat of killing forty-two pigeons in 4 minutes and 40 seconds, which is said to be the best shooting on record."

Bogardus, Adam H. Field, cover, and trap shooting.


p. 310-343. "Pigeon shooting."

Butcher, William. The passenger or wild pigeon. Bird. Grove 5 (1903) p. 211. "Frank M. Chapman tells me that as late as July, 1881, he saw wild pigeons used in large numbers at a trap-shooting tournament held near New York City. The birds had been netted in the west and were often so helpless from their confinement in fruit cages that they were unable to fly."

Editor. Shooting at pigeons. Ann. Sportman 1 (Aug. 1872) 4. "As pigeons are generally turned out at twenty-one yards, the knack of killing them consists in firing the instant they are up, and being careful not to shoot under them, as they take so hard a flight that, if subjected to fly any distance, they are apt to get out of bounds before they fall."
Shooting Matches


used by shooting club: "The traps used at that time were made of a long, slender piece of stickery for a spring, at the end of which was nailed a box with a hinged lid. When the spring was bent down the lid was held shut; when the spring was liberated, it flew up with great force, throwing the imprisoned bird into the air."

"In this connection, I have noticed that the wild pigeon, when thrown into the air, quickly righted itself and made a beeline for the woods; but the domestic bird ... made for the nearest building.

"Those birds that were fortunate enough to escape at the traps, had to run the gauntlet of boys and others who shot them when they flew out of bounds, so that few escaped. The wild pigeon was a much more difficult bird to shoot on the wing than the domestic one."

Chapman, Frank M. The fate of the passenger pigeons. Country Life 50 (Sept. 1926) 49. He saw pigeons shot from plunge traps at Coney Island in the summer of 1881. Was told that they were netted in the Indian Territory.

Chicago Journal 

"Threatened extermination of the wild pigeon. "To show the way in which sportsmen themselves massacre pigeons, 14,000 birds have recently been caged for slaughter at Peoria. The Illinois State Sportsman's Association is holding its great annual shoot here this week." Suggests using red-winged blackbirds in place of pigeons. - Baldwin (Wis.) Bulletin Sept. 6, 1879, [1]."
Shooting Matches.

Editor, "Wild Pigeons," Chicago Field 13 (April 17, 1880) 152.

Re: Platte River, Benzie Co., Mich., nesting. "At present the number of birds in market, dead and alive, is small, but daily the receipts will increase. As yet they are all old birds, but are in remarkably fine condition. Last week live birds were quoted at $1.75 a dozen and dead birds at $1.50 a dozen; this week the price is $1.50 and $1.25 a dozen.

"Messrs. Rand and Ellsworth have fitted up the two upper floors of their store in the most approved manner, with vine cages, to be floored with gravel from Wisconsin, in which they can accommodate twelve thousand birds at one time."

Editor, "Wild Pigeons," Chicago Field 13 (May 8, 1880) 220.

"Messrs. Rand and Ellsworth inform us that wild pigeons have been coming in more freely during the past week, having now in crops about 8000 birds, and that clubs are being supplied in limited numbers. The smaller nestings are mostly broken up, and the only supply which the nesters have now to draw from is the big nesting near Petoskey, Mich."


States that about 1,000,000 pigeons nested near Grand Traverse in 1881. Doubtful. "Some 20,000 birds were taken here to be butchered within a week during a trap-shooting tournament at Coney Island, New York."

Anon. The great pigeon roost. N.Y. World July 4, 1874, p. 2.

"Nesting at Frankfurt, Benzie Co., Mich., 1874. "The New York State Sportsmen's Association has taken 40,000 or 45,000 live birds from Frankfurt."
Shooting Matches

Carter, C. M. "Shooting in the early days from 1863 to 1877." (1919) p. 11. "In 1872, the writer and my old friend, Ashbey Deane, concluded to arrange a real live wild pigeon trap shoot. We bought two hundred wild pigeons, put them in a pigeon house in an old barn, and Deane and I fed and minded them for about ten days. Finally, in June 17th, 1872, we got up at 4 A.M., from the birds in cages, hauled them to the Heathington Statue at Cambridge, put them in a baggage car and unloaded at Grand Junction; hauled them to the old master field and started the shoot. We had fourteen shooters each shooting at 12 birds..."

[William Brewster was in the party.]

Bagg, E. "Birds [of Oneida County, N.Y.]. Oneida, Hist. Soc." 12 (1912) 44-5. "State Sportsmen's Convention held in Utica in 1873. "From my scrap book I find that the number of birds shot at during two days at this convention was 2,860 in the regular matches."


Krider, John. "Sporting Anecdotes." Phil. (1853) pp. 272-7. "Pigeon - Match Shooting." Rules to be observed. "The spearing - trap is now comparatively little used; being considered by practical pigeon shooters to give the bird too little chance of escape."

"The passenger pigeon... has been frequently shot from hills in this country, and when not disabled by confinement, affords excellent sport. It flies very swiftly and, in general, straight from the trap, and cannot be brought down unless covered immediately. They should, however, be used for this purpose as
Thomas, Edward. Trap shooting in the old days. Acuting 66 (1915) 368-72. p. 369. As far back as 1830 to match at wild pigeons was shot in Cincinnati, Ohio. Plunge traps used for doves, usually wild pigeons. P. 370. "The writer remembers one event at wild pigeons for a state championships ledge, in which out of nearly a hundred entries only five scored ten straight, and another two at twenty bids, where no one killed them all." P. 372. Wild pigeons used when available. Cost 20, 25, and in extreme cases 30c. each. "During the wild pigeon season, April to September, probably half a million were used" and 2 to 3 times that many domestic pigeons.

Martin, E. T. What became of all the pigeons? Acuting 64 (1914) 479. "The last year short of importance where wild pigeons were used was that of the Illinois State Association...early in August, 1868." Difficult to get the birds. The 10,000 reserved were not quite sufficient.

p. 481. "With pigeons, the most plentiful and plenty at fatten, there was no year in which the demand for trap shooting exceeded 500,000. The Chicago dealers handled practically all the Western and Southern trade in live birds. The writer is in a position to know that in 1878 it reached trap figures, about 250,000. The demand for trap shooting was not so heavy in the East, say 150,000, which would leave 100,000 for scattered shipments direct from the nestings or by commission men."
Shooting Matches

Montante (d) Sentinel July 19, 1875. The total number
of birds shot at Lake Como by the St. Paul Minn. club
during the month of June amounted to 8400.

pigeons for a trap shoot.

Editor. [Wild pigeons], F. 45, 10 (June 12, 1878) 363.

The state association composed of St. Paul, Minn., and 10,000
pigeons have been received for the shooting tournament.

Editor, Fourteenth Annual Convention of the New York
Sportsmen's Association. Am. Sportsman 1, No. 10 (July, 1872) Supplement. In the regular shoots at Seneca
Falls, N.Y. May 28–4, 1872, 4,310 birds were shot at
and 2,780 killed.


A note at the New York State Association for the Protection
of Fish and Game for trying to secure pigeons for a
shooting tournament.

B. C. M. "Meeting at Sparta, Wisconsin." Am. Field 17
(May 27, 1882) 364. Eau Claire, Wis. May 20. "Our
club employed two boys to catch some pigeons recently and
they secured quite a number. On the day they were to be
shot at, a Barga philanthropist hired the boys to let
them go free.

B. S. Baring. "The laws of trap shooting." New Orleans (1875),
Shooting Matches

Milwaukee Evening Wisconsin June 24, 82 [4] "Grand Inter-State Shooting Tournament." Managed by W. P. Thomas and W. H. Cash. 8,000 choice, old, wild pigeons will be used.

July 1, 82. This forenoon a Wisconsin reporter was shown through a pigeon loft, kept by H. D. Gardiner, at No. 1, 924 Wells street. The loft contains about 3,000 wild pigeons, and the din and confusion made by them flying about is terrific. Two boys are kept busy feeding them, and they are sold to supply birds for matches. They are obtained by visiting the breeding places of the birds, where they are shaken out of the nest by jarring the trees.

July 7, 82., p. 2. "Pigeon Tournament." Receipts $1,700 and expenses $1,100. Of the 6,200 shipped, only 3,000 birds used. W. H. H. Cash relates how he admitted Chicago commission merchant.
MR. BERGH ON PIGEONS AND SNAKES (FROM THE NEW YORK WORLD, JUNE 12). F. 4. 5. 16 (JUNE 16, 1881) 388.

Bergh was asked what he intended to do about the 25,000 pigeons ready for the New York State Sportsmen's Association tournament to be held at Coney Island next month. Stated that he had tried repeatedly since 1874 to introduce a bill to prevent shooting the pigeons.

"MR. BERGH'S ANTI-PIGEON SHOOTING BILL." - F. 4. 5. 16 (JULY 14, 1881) 468. Just as we go to press we learn that the Senate has passed the bill prepared by Mr. Henry Bergh prohibiting the trap shooting of pigeons. The bill awaits Gov. Cornell's signature before becoming a law. Its provisions are:

section 1. "Any person who shall keep or use any live pigeon, fowl or other bird or animal for the purpose of a target, or be shot at, either for amusement or as a test of skill in marksmanship, and any person who shall shoot at any pigeons, fowl, or other bird or animal, as aforesaid, or be a party to any such shooting, or any person who shall rent any building, shed, room, yard, field, or other premises, or shall suffer or permit the use of any building, shed, room, yard, field, or other premises for the purpose of shooting any pigeons, fowl, or other bird or animal as aforesaid, shall be guilty of a misdemeanor."

The bill is a direct and not wholly unexpected result.
If the Coney Island pigeon killing tournament of the New York State Association for the Protection of Fish and Game, had the spot of pigeons shooting been confined to individual clubs of gentlemen testing their skill at the traps, it is doubtful if the matter would ever have received, as it would not have merited public attention. But when a society, which organized ostensibly for the protection of game, treats the public to such a spectacle as that at Coney Island, neglects the matters with which it shall be concerned and devotes 20,000 pigeons brought from their resting grounds to its wholesale slaughter, its members can hardly look for any other public sentiments than exactly that feeling, which has been aroused, an afternoon shoot at a few pigeons, and a few days’ shoot at unlimited numbers of helpless birds. Many of them escape, unable to fly, and others too exhausted to do so — are regarded by the public as two very different things.

Nineteenth Century 18 (May 11, 1882) 287.
Editor. The State Shutter. F.T.S. 6 (June 1, Thurs., 1876), 273.

Pigeon matches at Genesee, N.Y., last week. An Genesee river.

"In front of the stand are H and T plunge traps were fixed in the ground. The contestants were numbered off in squads of twelve each, air being at the score while the other air stood ready to take their places. As a bird is killed or missed, the scorer announces the result and calls the next man to the score. With a guide, 'caller', the shooting is carried on almost without the rapidity of pile-firing. At every round six boys, each with a pigeon in his hands, start from the shed where the pigeons are kept and fill the traps. One squad leaving short at their quota of birds while the next are preparing, the boys swarm over the field and gather in the dead birds, wringing the necks of the wounded. There were ten thousand pigeons on the ground, brought from Michigan by Mr. Knapp for the purpose. The birds were extremely lively, and in good condition. There were probably, at the least, one hundred and fifty fowls shooting during the week, and of course guns of every make and fashion were in use." Only half a dozen muzzle loaders to be seen. Most used No. 9 shot in
**Choke Cores.**

Cbid. 6 (July 20, 1876) 391. Grand pigeon shooting match to be held in St. Louis under management of J. T. Martin of Chicago who will supply the birds.

Fowler, N. Y. Birds of central New York. (Aug. 24, 1876) 36. *Ectopistes migratorius.* Arrived the first week in March, is common and breeds.

Peerless Parks, N. Y. about. F. P. S. 7 (Oct. 5, 1876) 187. The pigeons were wild ones, and with few exceptions were not strong on the wing.

Ed. Vol. 8 (May 17, 1877) 228. 20,000 birds have been contracted for for the State Sportmen's Convention to be held in Syracuse, N. Y.

20 yards inside, 80 yards Boundary. The State Shot. F. P. S. 16 (May 26, 1881) 337. Twelve thousand wild pigeons have been trapped in Indian Territory, and are now at Jersey City, where special corps have been prepared for them, and where they will remain until the tournament.
Skeletons
Pitelka, F. A. and Bryant, M. D. Available skeletons of the passenger pigeon. Emu 44 (1942) 74-5.

[Reiniger, John T.] Arch 59 (1942) 459. Re above in "Recent Literature." The accompanying list of available complete skeletons of this bird (in America) needs amplification. No mention is made, for example, of six complete (and one partial) examples in the American Museum of Natural History, New York!"

"Their present scarcity can be shown by the value of their skins: in 1885 they were sold as low as 75c; in 1887 they rose to $2.00; and at present they are listed at $3.00, and very scarce at that figure, only a few being in the hands of dealers. None are even offered in exchange nowadays."
Audubon, Maria R. Audubon and his journals. Vol. 1 (1909) 141, European Journal, Oct. 21, 1826. "I wrote down for Mrs. Rathbone a brief memorandum of the flight of birds... With Pigeons, when travelling, two miles per minute."

Wistar, N.O. The land-birds, and game-birds... (1897) 378. "The land-birds, and game-birds... (1897) 378. Wistar, N.O. The land-birds, and game-birds... Chicago Field 19 (Jan. 11, 1879) 345. "The flight of a pigeon is, under favorable conditions, sixty to ninety miles an hour."

Greenleaf, Rev. P.H. Observations on the Flight... Madison, Ind. March, 1855. Proc. Acad. Sci. Nat. Hist. 3 (1856) 181... and we measured their speed in movement, by comparing it with that of the steamer J. A. Steamer, a packet 325 feet long, that moving up the river, it did not seem to exceed that of the steamer. Birds were flying against the wind.

Lawrence, George N. An account of the former abundance... Dec. 6 (1889) 221-2. Island of Manhattan. "About the first of September, when there was a strong northwest wind... one sweeping down over the tree tops seemingly at a speed of about 75 miles an hour... never succeeded in killing more than four with one shot, from a passing block."

Fisher, Morely. A vanished race. Bird-lore 15 (1912) 78. "Built for speed and action the pigeon outstripped every bird of its size in swiftness of flight. Competent observers agree that the bird flown at the rate of a mile a minute, or 88 feet per second, a speed greater by far than that of its celebrated cousin, the Carrier Pigeon, one of which averaged fifty-two feet per second for a continuous flight of five hundred and ninety-one miles."
Speed.

Andersen, Ullow. The passing of the passenger pigeon. Am. Schieler 15 (1946) 213. "During migration the birds flew with great swiftness (forty to sixty miles per hour)"


Mann, Charles G. Die Mannostäube. Jahresb. (1881) p. 43.

Pigeons travel 60-70 miles an hour.

Thompson, W. W. The p. pigeon. [1921] 13. A Michigan professional says the birds fly about one mile per minute; that he had timed them often, in Michigan the land is cut out in sections one mile square; as the head of a flock passed the section line a flint of a handkerchief gave notice to another person on the other side of the section who, with watch in hand, the time in passing was very accurately taken. A large number of observations fixed the time in passing at one mile per minute.


Flight speed of pigeons:

- Homing pigeon (552 miles) 39 miles
- **Average maximum**: 45 miles
- Wood " (frightened) 45 miles
- Blue Rock **"** 45 miles
- Pigeon (top speed with tail wind) **60"**
Speed

Andrubius, Vol. 1 (1831) 319-20. "Their great power of flight enables them to survey and pass over an astonishing extent of country in a very short time. This is proved by facts well known in America. Thus, pigeons have been killed in the neighborhood of New York, with their crops full of rice, which they must have collected in the fields of Georgia and Carolina, these districts being the nearest in which they could possibly have procured a supply of that kind of food. As their power of flight is so great that they will de不间断 feed entirely in twelve hours, they must in this case have travelled between three hundred and four hundred miles in six hours, which shows their speed to be an average of about one mile in a minute. A velocity such as this would enable one of these birds, were it so inclined, to visit the European continent in less than three days."

[Rice in crops mentioned by de Crevescoeur, (1782) p.37].

p. 320. "When an individual is seen gliding through the woods and close to the observer, it passes like a thought, and on trying to see it again, the eye searches in vain; the bird is gone."


Editor [Speed of homing pigeons] Ashery 1 (1897) 149.

Pigeons liberated at Emsion, Mo. on June 11, arrived in Milwaukee, a distance 400 miles in 9 hrs. 20 mins. This is a speed 42.9 miles per hour.
Chicago (Ill.) Times, Commerce March 24, 1936. Always Faithful, a homing pigeon belonging to the Signal Corps, U.S. Army, in 1935, flew from Chattanooga to the rear, a distance of 715 miles, at an average speed of 47 miles an hour. Had 1,114 competitors.
Squabs.
French, pp. 98-9. Edwin Haskell. When the birds came to the ground, the squabs that were not killed would flutter off, giving the chasers a lively run before they were secured. When caught the crop was seized between the index and middle finger, the hand giving a quick pull, removing head and crop with a single motion.

Deane, Ruthven. Abundance of the j. pigeon in Pa. in 1838, Archaeology 48 (1931) 264-5. Letter written by Peter Yarnall, Jersey [Wyoming Co. Pa.] March 17, 1850. "When the young pigeons become fledged, they are so fat that they are much heavier than the old ones...to supply themselves with squabs, they stroke the trees with their aces, and frighten them out of their nests...they had much more fat on them it was required to cook them and I thought it the most delicious meat I ever tasted of the wild kind."

Eaton, E.H. Birds of New York. I (1910) 384. Santa C. Hart Merriam. (1881) Rev. pigeons in Adirondacks. Early in June, 1878, found in a nest an squab nearly ready to fly. "The crop of the young bird was full of beach nuts, some of which had the shells on."

Scherec, J. E. P. f. in N.W. Penn. Cardinal 5 (1939) 37. "The squabs that were raised in pens became quite tame. Since became so tame that on escaping they would allow themselves to be taken again."

Mann, Charles L. Die Wandertheile, Jahrest, (1831) 45. "The squabs are caught, the young do not suffer for they are fed by foster parents. An abuser has seen a female feeding 7 young ones after another with one filling of her crop."
Squab

Engle, James. The pigeon days. Grant Rapids (Mich) Press. Oct 28, 1933. Squabbing. "It reminded me of apple picking, because when the trees were shaken the squabs fell, sounding like big apples. The squabs were removed from the squabes and they were packed in ice and shipped. " In seven or eight days after hatching the young were trying their wings.

"Tom Traunt." At pigeon roost. Red Y, June 3 (June 2, 1876). 49.

"...but being left without food and compelled to fly out of the nest, they became in a day or two very weak and thin, and anybody that was so inclined, could go in the nest and pick up all the squabs they wished for a day or two, when they began to get strong of wing, and then "squabbing" was played out.

Pikayen. The wild pigeon... Chautauquan 22 (1895) 203.

"Both sexes secrete in their crop milk or curd with which they feed their young, until they are nearly ready to fly, when they stuff them with mast and such other raw material as they themselves eat, until their crops excel their bodies in size, giving them the appearance of live birds with one head." [Remainder duff hic]. Says all orphans are fed by the old birds.

p. 205. Copy in statement on setting fire to birch trees to roast the squabs.

Knaps. See under Milk.
Thompson, W. W. The p. pigeon. [1921] 5. "It has been stated that for a pigeon, killed a parent died. In all stories were many birds not nesting, roosting birds they were called, consisting of both sexes. The old pigeonry claimed that if a mate was lost a new one from the roosting took its place. We do know that we have killed a pigeon just after it left its nest to give place to its mate.

Two days later we were in the same place and there were two birds attending this identical nest—a new mate had appeared. We plot the first bird to see if the pigeonry had told us true."

Henshaw, W. B. The p. pigeon. (1907) 206. Pekyans: "After the young leave their nests, I have always noticed that a few of the males and females stay with them. I have seen as many as a dozen young ones assemble about a male, and, with drooping wings, utter the plaintive begging notes to be fed, and never saw them missed at such times by either gender."


"On the thirteenth day they receive their last meal from the bills of the old birds. The toms and tins arise from the tops of the trees like a great cloud, and are quickly lost to sight. The squabes lie blinking in their nests for two hours. Am finding themselves deserted, they toddle to the ruins of their baskets [nests] and balance themselves, after a preliminary flutter of the wings, they strike out for a limb near it, lose their equilibrium and tumble to the ground. They then wander about like drunken men for three or
fowls days are, they learn enough to seek food or water. Fully a week, chapter 9, they are justified flying condition. When they become lean they readily take wing and skirmish for themselves. The wing feathers grow much faster than the feathers in their tails, and when they grow them a lucent appearance. They assemble boys in monkey jackets. A lack of tail feathers sends their rudderless through the air. They are forced to fly in a straight line, swerving gently between the trees. An alighting they frequently pitch head over heels, and appear disoriented. At first they form small flocks, but as they grow stronger giving these flocks come together, and the charming brigade pitches for a good feeding ground."

Curteiss, Wedge, F. History of Buffalo and Pepin Counties, Wisconsin, Winona, (1919) pp. 1029, 1031. Nesting in Town of Frankfort, Pepin Co., Wis. in 1869. "When the young pigeons began to fly, and especially after a little rain, it was impossible to drive along the road without killing a greatly number."

Audubon, Vol. II (1831) 326. "The young are fed by the parents in the manner described above; in other words, the old bird introduces its bill into the mouth of the young one in a transverse manner, or with the back of its mandible opposite the separation of the mandibles of the young bird, and discharges the contents of its crop. By the end of six months they are capable of reproducing their species."
Squads.

Hedge, C. F. P. Higgins investigation. F. & S. 74 (May 21, 1910) 812. Prof. Whitman notes that "the squad leaves the nest when fourteen days of age."

An alighting, see under alighting.

Wilson, Elta (1934) see squad collective under resting.

Hewitt (1932) 5 lights 14 squads.
Pigeons

H. S. (Hurley, N. Y.) [Steel pigeons]. Ann. Field 21 (April 26, 1884) 396.

Helped his father feed the steel pigeons night and morning for he did not wish to take the thread from their eyelids, as blinding cures every day might irritate the lid and cause it to become sore.


Certain tame birds were 'extra good' as steel pigeons, others never became very tame, and flopped around too much.

Some live pigeons were kept through the winter, because in spring it was hard to get steel pigeons. They were held in pens that gave them room to fly just a little, but not so large that they would become wild. A steel pigeon might be used for two or three years. These birds became very tame.

"The steel pigeons ... after the needle had been put through a number of times, the little became permanent; ... Some of Mr. Aristi's pigeons became so tame that he did not need to bind them on the stock. The steel-pigeon's feet were tied in little boots, and these in turn were secured to the end of a six-foot stick - the stock. This stick at its mid-point in its length was pointed to the top of a stake set upright in the ground. When the free end of this pointed stick was swung up and down (by means of a cord), the bird at the other end would be raised or lowered through a range of about three feet. In coming down it would hover, like a bird about to alight, thus decaying the flock in the air."

"Tons were used more often than hens as steel pigeons, for they were a little larger and more brightly colored.

Read pigeons placed on the box with their backs up, even without keep to hold up the heads, were more effective decoys.
Stock Pigeons

Thompson, W. W. *The p. pigeon* [1921] 13. In 1870 he
spent a few evenings watching the professional catchers
care for the birds used in netting. At night all the
birds were copied

Pundy, J. B. *The passenger pigeon in the early days
The stock pigeon and two flyers were "blinded" by
inserting a needle between eye-ball and tip of lower
lid of both eyes and tying thread over the head.
Blood scarcely ever appeared and there was seldom
any screechers.
Sulphur (1758)

Fauquet, E. P. Histoire de la Louisiane. Paris Vol. 2 (1758) p. 130. Describe burning sulphur in pieces of coffee pots or earthen pots to the number of five or six containing in each 2 annes of sulphur, placed at equal distances around the base of the tree. A short time after lighting there will be a "shower of pigeons."

Jeffrey, J. The natural and civil history of the French dominions in North and South America. London Part 1 (1760) 160. In Louisiana sulphur is burned under pigeons at their nest to capture them.


M. S. W. Amer. Field 16 (1881) 362. Being used in Tennessee.

Audubon 1 (1831) 323.
Trappers

Belknap, Charles E. "The yesteryears of Grand Rapids," pp. 137-8. Frank Ellingwood, retired trapper, long resident in Grand Rapids, said, "I learned to catch pigeons in a net when I was ten years old at Millford, N.H. When fourteen years old [1856] I went to Sandy Creek, Allegany Co., N.Y. "Trapped pigeons at nesting near Boylston. "For many years I followed the birds to their nesting and feeding places as far north as the Cumberland Mountains and north to many points in Michigan."

E. June, Relation, 1656-57, Jesuits Relations 43 (1899) 153.

Lake Flanmenta, (Ameriques), N.Y., July 1656. So many pigeons collect at the salt springs in spring "that sometimes as many as seven hundred are caught in the course of one morning."

Raffort, Father: Relation 4 1671-72: Jesuit Relations 56 (1899) 49, Mississ R. Saint John at (Ameriques, N.Y.) Many anes are set there for catching pigeons, from seven to eight hundred being often taken at once.

Lewis, Frederick T., Cotton Mather's manuscript reference to the passenger pigeon. Ark 62 (1945) 307. Cotton Mather writing to Dr. John Woodward, Nov. 19, 1713: "We take them either with Guns or with Nets; it is hardly credible, how many at a time."

Boucher, Pierre. (1664) p. 43. Upright nets used by Ariquids.

Mahan, Ret.. A description... Ark 28 (1911) 64. In 1750 Ameriques catch pigeons in nets stretched by cords from a hut.


Bolwood, J. M. History of Hadley... Mass. (1861) 359. "Pigeons were taken in nets around Boston as early as 1700, and in that county [Hampshire] before 1740."

Mahan, P. Ark (1912) p. 64.
Clarke, H. K. *History of Needham, Massachusetts, 1711-1811.* Cambridge, [1912]. 46. Estate of John Mills appraised in 1763. "Among other items were 'two pigeon nets,' ..."

Da Potherie, (1722)

186. End description of pigeon roosts, when operating.

186. When food became scarce returning birds in evening
had little in their crops and could be decoyed.

p. 194. Nested in highlands of Potter Co., in 1861, William Sherwood
and Oth Lyman used a net: 12 x 26. Caught more than
1670 pigeons first day before 11:00 o'clock. Arranged 110 each
spring 9 net at Burtville. Became dry and few caught afterwards.

p. 197. Daniel Ott caught 1300 in one day.


196. Double nets, released towards each other.

218. James V. Bennett.

227. C. K. Saber. 

As May 11, 12 and 13, 1880, 3 men
near Kane, McKean County, hundreds of young wild pigeons
killed with clubs (mornings and evenings as they flew
in long lines in an open passageway but through brush
and trees for a pipe line). These birds (no adults with them,
flown by thousands, about six to twelve feet above the ground,
in almost a continuous line along the open passageway
men stationed themselves along the line and killed the
birds, as they passed, with clubs.


229. Rides shot, trap shooting.


254. C. W. Dickinson. "When a small boy we caught
hundreds of them in quail traps."

214. James V. Bennett. At out 15 x 40 miles in Indiana Terr.
with 2 1877-8, nine Indians in three nights shot and
sold 3,630 pigeons.
N. Robertson (1906) County of Bruce. He was too big to kill, but he was coming that way.


Ames: "Mode of decoying wild pigeons in New England."

Shanimal's Am. J. Sci. 16 (1829) 373-4., the use of flight and arrest pigeons. Netting.


Barq, E. Birds of Oneida County, N. Y. pp. 44-5. Nets

18 x 38 feet "so placed that when spring, the inner edges of the nets meet together and lap slightly."

Hawthorne, "Water," Vol. 6, p. 402, July 18, 1854. "Brooks has set out some of his pigeons, which stay about the stands on fenes or trees, and others... he begins to catch them the middle of August."

Vol. 21, p. 499. Sept. 12, 1851. "Saw a pigeon-place on George Heywood's cleared lot - the air clear tree set up for the pigeons to alight on, and the brush house close by to entice the man. I was rather startled to find such a thing going on now in Concord. The pigeons on the trees, looked like large black birds, with their long tails and pointed breasts. I could hardly believe they were alive and not some wooden birds well for decoy, they sat so still, and even when they moved their necks, I thought it was the effect of art. As bait used buckwheat, wheat, rye, corn, and sometimes corn shelled from the ear with a knife.
Trapping

D. S. Trapping wild pigeons. F. 4. 5. 14 (July 4, 1880) 433.

Corry, Pa. May 16. Meeting in Forest Co. Pierre Ketlinger and Doyle Dickson have so far this season trapped more than thirteen hundred dozen. A large proportion of the trappers live in Ohio and follow the birds wherever they roost from year to year.

Three weeks ago, just before the squawks ... could fly, about 200 Comanche Indians left their reservations about Warren ... May remained a week and during that time cut ... they left down hundreds of trees in order to get the squawks ... they left down on the ground one with dead birds, having killed twice as many as they knew how to dispose of. The male birds are called toms and the females hens.

Raporte, Frank S. Pigeons. Columbus Dispatch April 9, 1889.

Review of trapping by William M. Fisk. Nets had 2" mesh, generally 15 x 30'. Many trappers wore their own nets, corn scattered around net. When these attracted, the pigeons usually alighted with a whirl and in a formation similar to that of a funnel, 30 to 40 dozen taken at a time. Average was 20 dozen. There were three important resorts in Ohio, one near Kenton (Hardin Co), one at Buckeye Lake and the third in a swamp a mile east of Kirksville (Licking Co).

The Captain: Pigeon shooting in early days. F. H. S. 68 (April 27, 1903) 656-7.

On a farm near, in 1858, I remember at one time seeing three large farm wagons, with side boards above the usual posts filled to their top with wild pigeons that had been netted the night before. These nets were of two kinds, and were made especially for this work; one funnel-shaped, with wings stretched out from either side, and the other a long and wide affair fastened at each end to a long pole. Two or three men at each of these poles held them aloft as far as possible, stretching the net to
fishing. For this reason the opposite side of the trees from that on which the net was held and stretched and clods were thrown among the birds, and thus startled they flown into the darkness away from the lights. When the pressure against the net indicated that it was well filled the men in charge hurriedly carried the poles together, and they and the nets were thrown to the ground. Lights were then brought, the birds removed from their entanglement and killed. — On Pine Creek in Iroquois County, Illinois, W. B. Michigan and Life, (1872) p. 245. "Dr. Daracoor, from Frankfort, Illinois, told the writer personally that in 1850 (ovet) or 1861, when there was a large nesting in Peoria county, he took at one time 10 feet of the net, 100 dozen and 3 pigeon (1,316 birds) and that with fifteen he net brought him 560. These birds were kept alive until a schooner load was attained, when they were sent directly to Chicago for shipping. Dr. Voorhis states that at one time he had so many pigeons alive in crates that it took seven weeks to feed them.

Bishop, William H. History Of Roane County, W.Va. Spencer (1925), p. 55, account I wrote near Spencer about 1859, related by Thomas Tanner. Each man carried a meal bag over his shoulder arranged like a short jerkin. They were so crowded on every branch of some two or three acres of trees, that hire and there, every once in a while, a branch would break, bringing to the ground most of its load of birds. Then joined those yet remaining for an alighting place. Filled the air all about our heads; All one had to do was to reach out and grab them in the fly and stick them in the bags. This we did breaking their necks or heads with thumb and finger.
Milwaukee Daily Wisconsin May 7, 1850. A man in Perry County, Penn., caught in one day lately 3,076 pigeons which he sold for 25 cents per dozen, yielding $05.95.

- From Niles (Mich.) Republican

Perry, H. B., A description of the pigeons nesting in 1878...

Cheyenne Field 10 (Jan. 11, 1879) 345. Net is 6' wide and 20 to 30' long. "A bed of weeds or low barley grass is chosen, if possible at a natural salt lick, or a bed of muck, upon which the birds feed. The ground is cleared of grass and weeds and to allure the birds the bed is "baited" with salt and sulphur several days before the net is to be placed. ... in less than two days the bed is fairly blue with birds feeding on the regiments much.

Many trappers use two nets ranged along opposite sides of the bed, which are thrown toward each other and meet in the center. Use of "flies" and "stool pigeons." "A good stool pigeon (one which will stay upon the stool) is rather difficult to obtain, and is worth from $5 to $25. Many trappers use the same birds for several years in succession.

A fair average is 60 to 90 dozen birds per day per net and some trappers will not throw a net upon less than 50 dozen birds. Higher figures than these are often reached, as in the case of one trapper who caught and delivered 2,000 dozen pigeons in ten days, being 200 dozen, or almost 2,500 birds per day. A double net has been known to catch as high as 3,332 birds at a single throw, while at natural salt licks their favorite resort, 300 and 400 dozen, or about 3,700 birds have been caught in a single day by me net.

Wrenn, W. B. P. Pigeon (1907) p. 107. From Henry T. Phillips:

"I once pulled a net on a baited bed and we saved 1,370
Trapping

dozens alive, but many got not from underneath the net, those being too many on the bed. Net was 28 x 36 feet.

Crewe, 1832, p. 37-8. "We have twice a year the pleasure of catching pigeons... We catch them with a net extended on the ground, to which they are allured by what we call tame wild pigeons, made blind, and fastened to a long string, his short flights, and his repeated calls, never fail to bring them down. The greatest number ever caught was fourteen dozen [168], though much larger quantities have often been trapped. ... Every farmer has a tame wild pigeon in a cage at his door all the year round, in order to be ready whenever the season comes for catching them." Carlisle, Pa.

Beane, Ruthven. Abundance of tite pigeons in Pa. in 1850. Am. 48 (1931) 264. Letter from Peter Yarrall, Jersey City, to W. C. Pa. Mar 17, 1850. "Great numbers this spring... Our traps are made of sticks, like partridge traps, and we take them alive... James made a trap, just 4 feet square and set it in about two hours, he went to it, and found 21 pigeons in it. Yesterday we caught one hundred and three altogether... we have a coop, 12 feet long and 8 ft. wide, with poles placed for them to roost on, here we turn them loose and feed them. When they are first caught they will not eat before us, but I was surprised to find how soon they grow tame, in a day or two. They will come forward and eat like chickens." Kane 153 in the coop which will accommodate about 200.
Pennsylvania Statutes 1936.

Title 34, Article 13, Section 1361. "Provisions protecting wild pigeons. No person shall kill or take any wild pigeon or squab while on its nesting or roosting ground, or break up or in any manner disturb such nesting or roosting grounds or the birds thereon, or kill or catch with gun, net or trap, or otherwise take or destroy any such pigeon or pigeons, within one mile of any nesting or roosting ground, or discharge any fire-arms within one mile of any nesting or roosting ground, under a penalty of fifty dollars. Provided, That no person except citizens of this Commonwealth shall trap to catch wild pigeons with nets in any of the counties of this Commonwealth, unless he shall first have taken out a license from the county treasurer of the county in which said pigeons are found, for which license he shall pay the sum of fifty dollars for the use of said county, under a penalty of one hundred dollars. (1881, June 10, P. L. 456, §105[16])."

11/3/50. Checked at Harris Library and found that this law is still in force.
An act to prevent the killing or disturbing wild pigeons while on their brooding grounds.

Section 1. It shall be unlawful for any person or persons to use any gun or guns or firearms, or in any manner to manhã, kill, destroy or disturb any wild pigeon or pigeons at or within three miles of the place or places where they are gathered for the purpose of brooding their young, known as pigeon nestings. Nor shall any person or persons, fire at or attempt to kill or destroy any such wild pigeons or pigeons, or disturb their nests within said limits anywhere within this state, at any time from the beginning of such nesting or brooding until the last flushing of such birds, and every person offending against the provisions of this section shall be punished by a fine of not more than fifty dollars nor less than twenty dollars for each and every offense, together with the costs of suit, and shall be imprisoned in the county jail of the county wherein such offense was committed until such fine and costs are fully paid, or until discharged according to law; and in all convictions under this act one-half of all fines shall be paid over, by the justice of the peace before whose such trial is brought, to the person who shall have made the complaint in such case.

Section 2. Justices of the peace shall have jurisdiction to hear, try, and determine all cases arising under the provisions of this act, provided, the defendant shall not be deprived of a jury trial, nor of the right of appeal, as in other cases.

Section 3. This act shall take effect and be in force from and after its passage and publication.

Approved February 20, 1877.
Chapter 328 [Published April 12, 1883] An act to amend section 4565, Revised Statutes of Wisconsin, relating to game, entitled "penalty for killing game by net, trap, etc."

Section 1. Section 4565, Revised Statutes of Wisconsin, is hereby amended by the insertion of the words, "within three miles of its nesting place," immediately after the word "pigeon" in line six of said section 4565. No person shall kill, destroy, or wound any wild pigeon within three miles of its nesting place and any such so doing, shall be liable to the penalties provided in this section.

Approved April 3, 1883.

Chapter 374 [Published April 26, 1887] An act to secure the better preservation of game.

Section 5. It shall be unlawful to take, destroy or have in possession the eggs of any of the birds mentioned in this act, or of any wild pigeon, or to wantonly disturb or molest the nesting place of any such bird or pigeon, or to kill, wound or take any wild pigeon within three miles of a pigeon roost.
Mating

[Bishop, Louis E.] Pigeons by the millions. N.Y. Times May 9, 1886.

"As soon as a colony of wild pigeons is settled in its roosting place, the mating of the birds begins. The courting of the thousands upon thousands of pigeons in the roost during the courting period is kept up constantly for three days. This is the love note of the male. A tom pigeon ... selects the hen he favors, and courts her alone. If another tom wants her, there must be a fight among the males, which is always a fierce one. The hen perches on a limb near by while the fight for her possession is going on, and when it is over she is claimed by the winner and she becomes his at once."
Allbee, E. A. Passenger pigeons in eastern Iowa, in 1856-1866. Arch. 28 (1910) 261. My uncle sometimes sang:

"If I could shoot my rifle clear
at pigeons in the skies,
I'd bid farewell to pork and beans
And live on pigeon pies."


A Pigeon Flew Over a Field

It happened at Keshena, Wis., last week.
A pigeon flew over a field.
A hawk struck it.
Hawk and pigeon fell to the ground.
A boy with bow and arrow ran after them.
The boy's mother followed him.
She stumbled, fell, and a stick pierced her neck and severed an artery.
The woman bled to death.
The pigeon flew over a field.


Shawano Advocate Aug. 5, 1866. Gives an account of this incident and states that it was a Miss Barlow, resident of Keshena.


Literature [footnote]

Makin, Thomas. Poems (1729).
Cooper, "The Chainsearer"; The Pioneers.
getr fifty p/p. meeting on Crooked River, Maine.
Holme, John. A true relation of the flourishing state
Supposedly the earliest medical composition written in Pes.
"The Wild Fire".

Proud, Robert. The history of Pennsylvania. Phil. Vol. 2
Migration (Spring)

(Bent (1932) pp. 401-2.

North Carolina, Raleigh, April 18
Virginia, Highgate, April 20
West Virginia, French Creek Feb. 27 and April 10; Fairview, March 19.

Pennsylvania (occasionally wintered) Chambersburg, Feb. 13; Erie, March 13; Brockney, March 18; South Station, March 20; Ridgway, March 22.

New Jersey, Racoon, March 3; Plainfield, March 13; Caldwell, March 31.
New York (rarely wintered), Locust Grove, March 3; Cornwall-on-Hudson, March 4; Elmira, March 7; Painted Post, March 16; Glocester, March 20; Buffalo, March 27.

Massachusetts, Wood's Hole, March 20; Ponkapog, March 21; Amherst, April 9.

Vermont, Tydenville, April 9.
New Hampshire, Hollis, April 2.

Maine, North Thorne, April 28.

Illinois (occasionally wintered in southern part), Charleston, Feb. 3; Virden, Feb. 11; Lake Forest, March 4; Carthage, March 12.

Indiana, Millwood, Feb. 18; Brookville, Feb. 21; Jonesboro, March 1;
Brown County, March 7; Kokomo, March 13.

Ohio, Audubon, March 8; West Liberty, March 10; Fayette, March 15.

Michigan, Petoskey, March 20; Loche, March 22; Battle Creek, March 27; Plymouth, April 7.
Migratory (Spring)

Ontario, Kingston, March 21; London, March 24; Port Rowan, March 26; Toronto, April 18.

Dover, Dover City, March 13; Burlington, March 15; La Porte, March 16; Dubuque, March 22.

Webster, Ripon, March 8; Janesville, March 23; Racine, March 25; Shiocton, March 29; Delavan, April 1; Green Bay, April 7.

Minnesota, Traverse City, March 22; Bradford, April 1; Minneapolis, April 3; Zumbrota, April 8; Lake Andrew, April 9.

Manitoba, Awanne, April 8; Lake Winnipegosis, April 14; Greenridge, April 17; Ossowo, April 18.

Stone, Witmer, Bird migration records of William Bartman.

Arch 30 (1913) 338, Philadelphia, March 16, 1803. Clear warm day; large flights of wild pigeons. March 1, 1804.


Baird, W.M. and Baird, Spencer F. List of birds found in the vicinity of Carlisle, Cumberland County, Penn. Illman's Ann. Sci. 46 (1844) 270. 1841, March 31; 1842, Feb. 4; 1843, April 6.

Ballard, Ralp. Pigeon recollections. Jack Pine Martler 24 (1956) 137. Miles, Berrien Co. Mich. paper, Feb. 1, 1851. "The thousands of wild pigeons that were seen flying north this year..." This week, must meet with a sad fate."
Migration (spring)
Blackiston, Capt. T. On birds collected and observed... 1863. "The first passenger pigeons arrived at Fort Carlton [Saskatchewan] in 1858, on the 23rd of May, and by the middle of June numerous flocks were making their way northward.

Francis B. Daniels, Diary. Grand Rapids, Mich. March 18, 1865. "Saw three flocks of pigeons... this morning the first I have seen." March 20... "great many pigeons flying south..."

Cooper, Susan Fenimore. Journal in nature club... Vol. 1 (1856) 12. March 27, 1848. "A flock of wild pigeons wheeling beautifully over the mountain this afternoon. We have had hot seen this spring... there is a great difference in the numbers which visit us from year to year; some seasons they are very numerous..."

Butler, Amos W. Birds of Indiana. (1848) 761. "They generally... returned in force in February and March..."

Byrd, W. Histories of the dividing line... (1929) 216. "But the most remarkable thing in their flight, as we are told, is that they never have been observed to return to the Northern Countries the same way they came from thence, but take quite another course, I suppose, for their better subsistence..."

F. J. W. F. S. 6 (1876) 91. "Huge flight at Altoona, Pa., on March 7, 1876..."

D. C. Estes. F. S. 6 (1876) 266. "Arrived at Lake City, Minn., April 8 and remained there the 9th, 1876..."

Jones, W. T. March memoranda. F. S. 6 (1876) 338. "Pigeons arrived at Lebanon, St. Clair Co., March 13, 1876..."

Fay, W. H. Three migratory compared. F. S. 6 (1876) 354. "Dates of arrival at Wolfe's New Hampshire: April 6, 1874; April 8, 1875; April 2, 1876..."
Migration (Spring).

Bills, John B. Records of wild pigeons in southeastern Wis., 1864-1881. Proc. D.I.O.C. No. 14 (1910) 33. Occasionally in March we saw pigeons also. In March 1867, when the ground was still white with snow and a heavy sleet covered the tree, a fine flock of pigeons settled upon a little Burlington that stood close to our door.


"John." [Wild pigeons]. F. & S. 10 (March 14, 1878) 100. Reported flying a few miles west of Hornellsville [Steuben Co. ?] March 5, 1878.


Bryant, C. A. New passenger pigeons. F. & S. 80 (April 19, 1918) 515. The main flight of pigeons reached Petoskey, Mich. on Feb. 23, 1877 [1878].
Migration. Spring.

Bryant, C. A. The passenger pigeon. F. & S. 80 (April 19, 1913) 494.

(Central Michigan). "In early spring, often while the snow still covered the ground, the northward flight of pigeons commenced. A few warm days in succession and the advance guard of the flight came in small flocks. Often they stopped to feed, seeking the places where hemlocks with a southern exposure had been left bare by the snow ... the advance flight did not remain long, but as soon as they had fed, sped northward in search of resting places ... Following close on the wake of the first flight came the main army of the pigeons. Soon after daylight they began to fly north and continued to pass over until nearly noon, the majority of the flight of the day being over by the time the sun reached the meridian, though on cloudy or rainy days the birds often flew all day. On such days the pigeons often alighted in large numbers, giving preference at such times to the dry trees, particularly to those which had been girdled in the process of clearing the land. ... The spring flight never lasted more than about a month altogether. The flight of the flock, the thousands and tens of thousands, which came in the spring, often passed over in three or four days. This flight was followed by smaller flocks, and these were often passing, a few at a time, for two or three weeks."

Hildreth, S. P. Notes on certain parts of the state of Ohio. Sci. Am. J. Sci. 10 (1826) 330. "They usually appear the beginning of March ... pass about a month with us, and proceed on their journey. In September they visit us again ... spend about six weeks ... They seldom pass the summer with us, but used to do so sometimes in the first settlement of the country; when they built nests, and hatched and reared their young in most small places."

Marietta, Washington Co.
Migrating - Spring

Though, Franklin B. Results of several meteorological observations...
New York, 1850 - 1863. (1872) 340-52. Migrating dates are
given for only 5 of 18 years.

1850. "Pigeons appear March 20, Rochester."
1851. "Pigeons seen in flocks, March 31, Cherry Valley, April 1,
Pomfret." 1856. "Pigeons appear April 1, Liberty."
1858. "Pigeons seen March 19, Rochester.
1860. "Pigeons in flocks from south to north-west March 12,
Elmira; 14, Rochester."

Marquette, Father, Journal 1673-77. Jesuit Relations 59/1900
1811. Illinois. "Late spring. Pigeons appeared March 26, 1673;" 1846 (p.41). "Their
progression northward and southward begins always about the
normal equinoxes ... and it is singular that their
migration falls out at the times of the year when the weather
... is generally cloudy."

"There was no pre-arrival of the males; ... even the very first flocks
contained toms and hens alike; and there were never any young
birds in the spring flocks. On February 26, 1830, Mr. Dietz's
dairy says, "Pigeons flew thick today." In 1870 he recorded
no pigeons earlier than March 21, when he wrote, "Too late of
pigeons." [Smethport, McKean Co.].

Newcomb, R.T. F. 46. 12 (April 17, 1879) 216.
Pigeons arrived at Salem, Mass. April 14, Season late.
Migration. Spring.


603. Flock of pigeons seen at Elmira, N. Y., March 7.

Williamson, Thomas. [Bird migration]. F. 45. 6 (April 20, 1876).

1603. Arrived at Dresden, Va., March 27.


Mayville (Chautauqua Co., N. Y.) Sentinel. March 5, 1840. Immerse blockchain flew once for 3,000 lbs. Feb. 29, 1840.


p. 331. April 5, 1836. "Pigeons are about."


Cumberland (Pa.) Potter County Journal. March 25, 1836. "Several flocks of wild pigeons passed over this place last Saturday [20th] morning northeastward bound."


13 (1891) 457. F. Wagner, MS. Bosque, April 18, 1885. Selden saw.

A. P. Smellie, MS. Oak Point, June 20, 1884.

C. M. Nash, "Common summer resident. Arrives first week in May.

Times, Peter. A description. Arch 28 (1911) 56. [Reverse migration]. "On 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..."
Migration, Spring

Cathrof, Prof. S. P. Calendar, Trans. Wis. State Agr. Soc.
for 1852. 2 (1853) 449.

April 14, 1852, wild pigeons seen. Below.

Atticus: Pigeons, Racine (Wis.) Advocate Jan. 23, 1844. Even in April the pigeons fly south, never north at any season.


Cassie, W. W. Report on bird migration ... Bull. 2 (1888) p. 109. "In the spring of 1884 its northward journey commenced about the middle of March, and by March 16, shelves here and there had noticed it up to latitude 42°. It was found about the forty-fourth parallel March 23, and reached Elk River, Minn. (latitude 45° 25'), March 29. The storms of April evidently delayed its progress, as it was not reported from Barton, Dak., until May 4, and did not reach Oak Point, Manitoba, until May 20. The Arctic was reported from Portage la Prairie, Manitoba, May 12, a few having been seen previously. On May 21, fresh eggs were found." In the spring of 1885 the northward movement began somewhat later than in 1884. The only records made previous to April 7 were: Hermelin, Ill., March 26, and Milwaukee, Wis., March 31. During the last half of April the migration was rapid, though irregular, and April 18 the first arrived at Osawano, Manitoba.

Quickshanks, Capt. E. The journal of Capt. Walter Butler


March 8, 1779, Saw a large flock of pigeons in trees,

[Niagara, Ontario]
Migration, Spring.


Large flights at Lake Simcoe, Ontario, March 19, 1858.

This is unusually early and due to open winter.

Earliest previous arrival April 21.

Coles, E. The manuscript journals of A. Tenney... 1 (1822) p. 14. "Pigeons flying N. in great numbers."


Hatch, P. R. Notes on the birds of Minnesota. (1842) 171.

Not arrived in southern counties as early as March 27, but the average is April 5.


"Sometimes they come as early as the latter part of March; while at times, a month later. This seems to depend on the season, their arrival being earlier or later, according to the forwardness or backwardness of the spring. They pass in their periodic migrations in flocks, which vary greatly in numbers. Some extend a mile or two in length, and consist of a countless multitude, while others are small. The flocks are often seen following each other in quick succession, and at short intervals. These migrations frequently continue for several days."
Migration (Spring)

Robert, Birds of Minn., 1 (1932) 576. Very irregular in time of arrival, the weather seeming to have much to do with it. We have four March dates, 9, 11, 22, and 24 (the first two exceptional), and three April dates, 6, 21, and 24. Occasionally they were not seen until early May. So. Minn.: (earliest, March 9, 1878, Minnesota, exceptional) average 3.5 dates, March 22 - April 24, June 7; of 3 dates, Sept. 13 - Oct. 5, Sept. 21 (latest, Oct. 5, 1890, Traverse, Fillmore Co.). No. Minn.: earliest, March 29, 1884, Elk River, St. Cloud Co., average 3.4 dates, March 29 - April 15, Aug. 7 (latest, Sept. 18, 1885, Ada, Norman Co.,

Jack Snipe. [Wild pigeons]. Ann. Field 19 (March 17, 1883)

191. Robinson, Crawford Co., Ill. March 10, "Last night the extensive flouring mills of Messrs. Collins & Kirk took fire and burned to the ground. After the flames had reached their highest point, the air was filled with swarms of pigeons and other birds as far around as the bright light of the fire extended."

"Peep Squir. [Wild pigeons]. Chicago Field 15 (May 14, 1881)

218. On April 25 several flocks of pigeons flew down Cheboygan Mtch., with two feet of snow in the woods.

Migration (Spring).

M.Y. Mirror  Feb. 1, 1858.  Milling few north

Jan. 31.  Mild winter.

Merriam, A. Hart. Winter notes... F. 45, 1862  287.
A flock of 30 seen in Lewis County, N.Y.
on March 3, 1882.

First spring (1881) the pigeons remained in the
South, due to scarcity of meat in the North, and did
not come north until fall. [Data for 1881 show that
they came north but few nested]. This year they
appeared in southwestern Missouri early in February.

Leffingwell (1891) 224. Lyons, Iowa. Many of the flocks
in spring migration consisted entirely of males, others
of females.

Smith, W. H. Canada: park present and future. Toronto
2 [1851] 426. At Toronto in 1851 first pigeons seen March 31.

Gibbs, R. M. Nesting habits of the passenger pigeons.
Columbia 11 (1894) 237-40. Has seen them several times
in Michigan in Feb., but usually not abundant until April,
come with a rush. No rule applies spring or fall.
Migration (Fall)

Bent (1932) p. 402. Late dates of fall departure:

Manitoba, Mount Royal, Sept. 15; Aveerne, Sept. 21.
Minnesota, Lake Andrew, Sept. 28; Traverse, Oct. 5.
Bemidji, Nov. 15.
Wisconsin, Belavan, Sept. 8; Kelby Brook, Sept. 16.
Iowa, Williams Town, Sept. 27; Keokuk, Oct. 12.
Ontario, Ottawa, Sept. 3; Toronto, Oct. 22.
Ohio, Wayne County, Sept. 19.
Indiana (probably occasionally wintered), Bloomington, Sept. 28.
Illinois (occasionally wintered in southern part), Warden, Oct. 5.
Kentucky, Casky, Oct. 30.
Quebec, Montreal, Sept. 15; Valley River Rouge, Oct. 7.
Massachusetts (rarely wintered), Worcester, Sept. 25, Plymouth, Oct. 16.
Connecticut (rarely wintered), East Hartford, Oct. 19.
Rhode Island, Newport, Oct. 19.
New York, Ossining, Oct. 1; Croton Falls, Oct. 16; Fort Valley, Nov. 4; Orange Lake, Nov. 17.
New Jersey, Morristown, Sept. 16; New Providence, Nov. 12.
Pennsylvania (occasionally wintered), Linden, Oct. 5, Monroe County, Oct. 25; Wayne Co., Nov. 3.
Maryland (occasionally wintered), Laurel, Oct. 11.
Virginia, Dunn Loring, Oct. 19.
West Virginia, French Creek, Oct. 20.
Migration (Falk)


Allen, Glover M. A list of the birds of New Hampshire. (1903), pp. 94-5. Dates April 7 to October 19.


Bicknell, C. J. S. Recollections of the passenger pigeon. Atlantic Nature. 16 (1902) 40-9. "Although these tremendous flights going north, were an annual occurrence for many years, I cannot remember that I ever saw a single large flock going south. The reason for this has always been a problem when one considers the enormous numbers which come from the north each year."

Ball, T. H. "Northwestern Indiana from 1800 to 1900." Chicago (1905) 19. "Enormous numbers in each August month. Nothing about numbers in spring."


Saw this last pigeon, Oct. 8, 1882.


"In Michigan usually the feeding grounds were across the straits, where blueberries were abundant, until fall, when the birds scattered back in small bodies feeding on stubble and elm seeds. Frequently they would go into a resting place, and make it a home for weeks, before leaving for the South. Traveling north, they usually flew until about ten or eleven in the morning and again in the evening."

Migration - Fall

Butler, Rev. W. Birds of Indiana (1898) 761. They generally appeared in southern Indiana as migrants, some years arriving in September. The greater number passed south when severe weather began...

Byrd, W. Histories of the dividing line... (1926) 216. But the most "Prodigious" flight southward at Matrimony Creek, N.C., on Oct. 19, 1728.

"A Brisk", F. 45. 3 (1874) 118. Small flock seen at Barnegat, N. J.

Sept. 27, 1874.

Riddell, John N. Recollection of wild pigeons in southeastern Pennsylvania...


In southeastern Pennsylvania the pigeons seldom made their appearance until September, but on two occasions I remember seeing them in August.

"The proper time to expect pigeons in our locality was the first cool spell of weather in September, especially after a heavy storm or none had been seen before. The first clear cool morning after the dew evaporated [appro. Sept. 28] we could expect them with absolute certainty."

"The Pigeons' stay in these parts was a comparatively short one, and I might say that from September 10, to October 10, they could be looked for at any moment, while from the latter date up to and including the first week of November, they were occasionally seen, but with rare exceptions only single birds. I recall three occasions when 3 shot single birds in November, and in each case they were feeding on the ground under oak and dogwood trees..." While as I have said it was the custom to see these pigeons as late as November, nevertheless the largest flock I ever saw was in early November 1877 or 1878, following a heavy rainstorm.

Butler, E. A. The passenger pigeon. F. 45. 80 (April 19, 1913) 494.

(Southern Mich.). The pigeons began to appear again, after the
Migration - Fall
spring flight, in our locality about the 1st of August,
the first arrivals being small flocks of sometimes not
more than a dozen birds. They made their appearance
usually in the wheat stubble where they came to feed on
the shelled wheat. As they increased in numbers, pigeons
gathered into larger flocks, feeding in the stubble; and as
the time for sowing fall wheat came on, they were present
in great numbers.

(1929) p. 216.

Oct. 19, 1928. Matrimonial Creek, on Va.-N.C. Boundary.

"Prodigious" flight southward.

Hutchins MSS; observations on Hudson's Bay, 1783, cited
by Thompson, Birds of Manitoba, p. 522. "Tis a hardy bird,
continuing with them till December."

* Lawrence, George N. An account of the former abundance.

Feb. 6 (1889) 261-2. "About the first of September, when
there was a strong northwest wind, Passenger Pigeons...were
sure to appear in great numbers, flying more abundantly in
the morning, though there were occasional flocks all day.


Notebook of Luther Adams, Townsend, Mass. In numbers trapped.

In Sept. 1947 the 1st pigeons on 13 days from Sept. 2-27.
Shows pigeons went south gradually.

Tarrant, Frederick T. Cotton Mathis's manuscript references to p. p.

Arch 62 (1948) 307.

Mathis, Nov. 19, 1718. Dives the time of their departure

as Michaelmas (Sept. 29).

* Lawrence, George N. The p. pigeon. F. 65. 52 (Feb. 18, 1899)
p. 126. Same information.
Migrutes. Falls.
post. Pa. from J. B. Crockett.] Generally did not stop in autumn,
but if so, for only a brief time.
Newcomer, R.B. F 4 6. 12 April 17, 18
Smith, Samuel. The history of the colony. New Jersey.
(1765). Trenton (1890) p 11. Sometimes to avoid north-east
storms, blew night and day; and thick enough to darken
the air.

Farrierman Vol. 23 (1918) 106, 145. Returning in
Autumn. At that time they scattered all over the country.
When the robins going south, seeking as they went, the
larger number of these pigeons were young which made
them of inferior quality.

Muir, John. The story of my boyhood and youth (1913) p 159.

H. Kingston, Green Lake Co. Wis. "I have seen flocks streaming
south in the fall so large that they were forming over
from horizon to horizon, in an almost continuous stream,
all day long, at the rate of forty or fifty miles an hour,
like a mighty river in the sky, widening, contracting,
descending like falls and cataracts, and rising suddenly
here and there in huge, ragged masses like high
splashing spray.

"Flocks of passenger pigeons are in from the north,
and leave from the 20th to the last of the month."
Fall, 1888.

“arly in September 1884 the first passenger pigeons departed from Williamsport, Iowa, September 18, and the last was seen there September 27. At Mount Carmel, Mo., the first pigeon was seen September 9, and the last September 21.

In the fall of 1885 the first appeared at Saint Louis, Mo., September 14; Mount Carmel, Mo., September 27; and at St. Louis, Ill., October 3. The last at Elk River, Minn., was recorded September 26, and at Mount Carmel, September 30.


Fisher, Wesley. A vanished race. Bird-lore 15 (1913) p. 81. “After the breeding season, swarms wandered about in the open summis pasture, and swarmed in the delicious and inexhaustible crops of berries, which ripened in rapid succession during their stay. With the coming of autumn, the flocks preferred to depart, avoiding the middle grounds, for obvious reasons. They leisurely moved southward over new highways, passing for weeks at a time in the newly stocked quarries located within the zone of travel. During the final stages of the retreat, the flocks formed once more gathered in great flight.”
Migration, Fall
Hatch, P. D. 'Notes on the birds of Minnesota.' (1892) 172.

Some principal birds leave the country by first of November, but a few stragglers remain as long as the meat is not covered by snows.

Ayres, J. D. [St. Louis, Mo.] [Wild pigeons]. F. & S. 69 (Nov. 16, 1907) 772. 'Our fowls were literally alive with them from September to December, when they migrated into Louisiana, Arkansas, and Texas.'

Mather, Cotton. 'An extract of several letters from Cotton Mather...' Phil. Trans. 29, no. 339 (1714) p. 64; abstract 5 (1874) 87.

'As to the itinerants,' he takes notice of vast flocks of pigeons, coming and departing at certain seasons; and as to this, he has a particular fancy of their repairing to some undiscovered satellite, accompanying the Earth at a mean distance.'


Williams Wood (1634) return in fall at Michaelmas.

Roberto, T. S. Minnesota - see under spring.
Migration, Fall.


By N. C. Brown.
Milk

Camp, R.R. Hunter's Encyclopaedia, [1948] p. 263. "The pigeon milk, which is furnished by both sexes, begins to form about the eighth day of incubation, and presumably is stimulated in the crop by a hormone near the brain. The fluid is derived from cells of mucous membrane lining the crop, which grow larger and multiply upon stimulus, and secrete fat globules. The cells are shed, and are a partial ingredient of the whitish liquid, which is high in fat and protein content but totally lacking in sugar. The production of this milk-like substance continues for about 20 days. At the end of that time the adult is able to take soft foods, seeds, etc., which are partially digested by the parents and fed to the young by regurgitation or a vomiting-like action which takes about three minutes. When a month old, the young are ready to leave the nest."

[Under hand-tailed pigeons]

Waller, Cotton. The Christian Philosopher... London (1721) 192.

states only males produce the curds.


"... forms on the inside of the crop, 1 in both $4 \& 2$ to the thickness of one-fourth inch, and resembles cheese curd as nearly as anything can. Hence the name. This curd at the exact time the young bird hatches becomes somewhat detached, breaks up in small particles, not unlike kernels of rice, and the old bird has the power of splitting up or rending which is fed to the young for a few of the first days of its existence. Whether it is necessary for the old birds at this time to have access to a particular kind of mineral water, found at deer and elk holes, is not positively known. It is well known that they frequent such places at that time in very numbers and are caught by the natives by the thousands. I am inclined to the opinion that..."
Milk

It is absolutely necessary, and that it acts chemically or other-
wise on this curd to detach it so that it can be readily fed to the
young. ... at four or five days old they will take beef-water
and even udders.

Shakespeare. Midsummer Night’s Dream. Act 1, Scene III.

I will war as gently as any sucking doe.


Riddle, O. and Brancher, P.F. Control of the secretory
function of the crop glands in pigeons by an anterior pituitary hormone.

Riddle, O. and Ryphorn, B.W. Secretion of the crop milk in the
1213-5.

Patel, M.D. The physiology of the formation of pigeon’s milk.

Hunter, John. “Observations on certain parts of the animal
in the crop of breeding pigeons for the nourishment of
their young.”

Lewis, Frederic T. The passenger pigeon as observed by
Mather as pigeon milk. Historical review of subject.

Schoepe. Unpublished manuscripts by Cotton Mather...Cork 55 (1938) 477. Quotes from a letter from Captain Billings: "The Corps were always by far ye fattest, and when we opened them we found in their crops, about ye & quantity of half a Hill of a Substance like a Tender Cheese. Cord. I asked some of ye Indians, what cause Pigems had Eaten; and why the Hens did not Feed as the Same. They answered, It was nothing they had eaten, but something that came naturally into their croipes, as milk does into the Paws of other Creatures; and that the Hens could not keep their young alive, when first hatched; and that thus nourished the young Birds, & caused them to open Fatter & Fly in half ye Time, that any other Birds could attain it."
Miscellanea.

French p. 17: Women planting pigeons with their sweet peas.

Audubon, Maria R. Audubon and his journals. Vol. 1 (1910) p. 212. Audubon states that he worked on "Habits of the Wild Pigeon"— "I began on Wednesday, and it took me until half past three I the morning...

Cope, James F. The chamberer. p. 220. "you saw that these pigeons lost their instinct, under the impulse given them by numbers. Had I never erected me against the tyranny of numbers..."


Remount, T. Arctic zoology. 2 (1875) 326. Ashton Blackbourne. (1770). "I think this as remarkable a bird as any in America..."

Stickland. Twenty-seven years in Canada West. 1 (1853) 297. "Purposes unacquainted with the country and the pigeons. Habits of this lovely bird, are apt to doubt the accounts they have heard or read respecting their nest numbers: since my return to England I have repeatedly been questioned upon the subject, in answer to these queries, I can only say that in some parts of the province, early in the spring and shortly after wheat harvest, their numbers are incredible..."

Mershon, W. B. The p. pigeon. (1907) p. 158. W. B. Barrows, July 14, 1905: "An unusual thing during August and September I have seen large scattered flocks of the Carolina dove which were feeding on weed seeds and grain in open fields, of which when disturbed, gathered into smaller bands of twenty to fifty each and flew and perched very much like Passenger pigeons. In one case I saw at least five hundred Carolina doves acting this way, and had I hard work to convince..."
a gentleman friend of mine that they were not Passenger Pigeons...

p. 160. George E. Allen in letter July 21, 1905: "I was on a holiday trip on the Ottawa River East week and a pair of birds flew by me at a few yards' distance, flashing the pigeons color to all appearances in the sun and alighting on the bank. I turned my foot and until after I shot the bird, I would have sworn it was a pigeon, but it proved to be a large, bright plumaged dove. Atmospheric conditions considerably affected the size so that I am convinced that it is impossible for even the best of us to be deceived and no scientific record must be formed on supposition."

Lancaster (Wis.) Grant County Herald March 14, 1846. Williams Pigeons. March 25. "Pigeons—Some are prophesying riches; predicting their tears upon the flight of pigeons."

St. Louis May 1, 1847. "The wires of the Telegraph were recently badly broken in the vicinity of Buffalo by immense blocks of pigeons flying against them. Many of the birds were picked up along the line that had been killed by the force with which they struck the wires in their flight."

Sturgeon Bay (Wis.) Enterprise Fri. April 14, 1876. "A flock of pigeons flying through the village last Sunday [April 9], found the houses so thick that it was impossible to dodge them all and four flew against Mr. Harmon's horse with so much force as to kill them."
"The other day George Batchler, of Battle Creek, Mich., was out hunting and found into a flock of pigeons. He brought down a peewee, and was surprised to find an oiled-silk bag tied to the leg of one bird, which, on being opened, was found to contain the following note:

"Lexington, Ky. May 21, 1881. — This pigeon is one of a number captured by my brother in a net. I conceived the idea of fastening this note to it, and secured the binder to write to Miss Eva Carroll, Lexington, Ky."

Scholes, Henry R., Personal memoirs of a residence of thirty years with the Indian tribes... Phil. (1851) p. 96: July 7, 1822, St. Mary's R., St. Superior, Compares the feeding of a flock of pigeons to the pressing mercy and blessing that marked the life in the place.

Editor. [Pigeons flying against wires] Am. Sportsman 3 (Nov. 1873) 12. "Several instances of wild pigeons falling to the ground dead or wounded from flying against telegraph wires have recently occurred in various parts of the country."

Newton & Richardson, Dictionary of birds, (1846) p. 127. States that this species is perhaps the best known of the pigeons.

Kunkel, Aarm Ludwig. Unusual accidents to birds. Field and Forest 2, no. 6 (Dec. 1876) p. 106. "I have seen pigeons with a considerable branch dangling beneath them. I have one specimen with a block hanging about nine inches long, that had entered the bird from beneath and pierced the femoral muscles, projecting about four inches..."
Miscellaneous

"on the back, it had undoubtedly fallen from the nest
when a 'squat' and been injured or a bird. It was
an old bird and the stick was much worn, it must
have been very unpleasant in walking."

Dubuque (Iowa) News June 16, 1838. Flesh just
alighted upon a building.

Passenger and migratoria not sufficiently described as all pigeons are more or less migratory. The "swarm" pigeons, the "flock" pigeons, or even the "deluge" pigeons would be a more appropriate appellation; for the weight of their numbers breaks down the forest with scarcely less force than if the stream of the Mississippi were poured upon it.
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Pigro

V. Velux (1950)

Shackleton

Heremun (1883)"-

Hantoff (1588)

"Shackleton"

Kahan (1869)

K. Enzlin (1933)
Pigeon nauvage

Shackleton

Vincen (1958)

Marte (1958)

Heronphini (1698), 193, Hérit (1585)

Harnott (1585) "Stockdanea"

Kahan (1759)

(la nuef)

Puta du defer

(Voeg)
Names, Indian

Dodge, E. S., Notes from Six Nations... J. Washington Acad. Sci. 35 (1945) 343. Brant River Reserve, Ontario.

Cayuga, tekko'wa Mohawk or i'te


Pigem, pachi

Pigem egg, pachmushi

Pigem root, pachahisho, pachamusi.


A pigem, uti.

Omemee, Bottineau Co, North Dakota.


Names. Indian

Morgan, Lewis H. Le lac leSeguins. (1851).
[Information mainly from sources]

p. 298 Schedule J. Seguins dancers.

#12. Tà-kò-wò-o-anî-no, pigeons dance.

Memee, or Pigeon River, just north of Shaboygan Wi.

Memee township and village in Manitowoc Co.

O memee, village, Victoria Co. Ontario.


Ommi, Tourte, vulgairement Tourte.

Wabomimi, Tourte Blanche.

B. Lemoine. Dictionnaire Francais-Algonquin.

Quebec (1911) Tourte Blanche, Ommi.

P.A. Lacombe. Dictionnaire de la langue des Ora.

Montreal (1874) p. 264. Tourte, ommin, ok.

Beissinger, Indian dictionary. Cambridge (1884) p. 143.

Amendaga, Tshiocharya; Delaware, Amemi.


Pigeon, Pûles; Wenjoepûles.


"Or Indians call these Pigeons, by a Name that signifies Wanderers."

Leaves, A. The History of Upm [Mass]. Boston (1829) p. 22. "The Indians called the pigeons Wuscowhan, a word signifying Wanderers."

["Wuscowhan", of Natick origin. These Indians lived at Natick, Mass.] Middlesex Co. Niantic?
The nest consists of a bunch of dry sticks and twigs, which
seem to be slightly thrown together, yet they are so strongly
and ingeniously connected with the branches that winds or
storms cannot dislodge them. One of the wonders is where all
the sticks... were gathered, which were used in the construction
of three nests. If there were only one or two thousand the material
could easily be found, but when the number reaches up into
so many millions, we are at loss to know where all the
nesting material could be collected. “The building begins about
the 1st of April, or before if the spring is favorable.”

Barrow, W. B. Michigan And life. (1912) 241. The nests were merely
flat platforms of twigs loosely put together, small and scarcely
distinguished, while no attempt at concealment was made... The
nests themselves were mere platforms of twigs and small sticks,
carelessly interwoven and so fragile as to be easily dislodged
or shaken to pieces. In many cases the single egg was distinctly
visible from below, through the bottom of the nest.

One of the major reasons for nest failures in this species
[Mourning dove] is stormy weather, when high winds will loosen
the carelessly constructed nests. A three-year survey of nesting
failures in Iowa revealed that 26 per cent of the losses could
be attributed to this cause.” (p. 267)
A study of the pigeon nesting habits...

...and the location of the nest is often determined by the suitability of the site. The nest is usually built near water, often in trees or on cliffs. The nests are generally round, and the eggs are usually laid in a cup-shaped structure. The nest is usually lined with grass, leaves, and other materials. The eggs are typically white and hard, and the young are hatched after about 14 days.

...the male

...the female

...the young

...the nest

...the site

...the eggs

...the hatching

...the young
The nests were constructed of small twigs laid up loosely and very carelessly, apparently, and yet I used to see the remains of some of them when I went hunting through the woods, eleven or twelve years after they were made.

[Dr. Robert Morris]. Nesting habits of the j.f.o. Colubrid. 11 (1894) 237-240.

"In the latter part of April or early May the birds began nesting. The nest building beginning as soon as the birds had selected a woods for a nesting, the scene was one of great activity. Birds were flying in every direction in search of twigs for their platform nests, and it did seem that each pair was intent on acquiring materials at a distance from the structure. Many twigs were dropped in flying, or as the nest, and these were never reclaimed by their owners, but were often picked up by other birds from another part of the nesting.

It takes a pair of pigeons from four to six days to complete a nest, and any basketmaker could do a hundred per cent. better job with the same materials in a couple of hours. In the nest of the pigeon, man could certainly give the birds points for their benefit, for it is one of the most slipshod structures placed in trees that I have ever met with.

The nest is always composed of slender dead twigs, as far as I have observed, or even learned from others, and in comparison, though smaller, much resembles some of the heron's structures. I have seen nests I have observed the materials are so loosely put together that the egg or young bird can be seen through the latticed bottom. In fact, it has been my custom to always climb the tree and examine the nests before climbing the tree.

"The platform structures vary in diameter from six to
Nests
twelve inches or more, differing in size according to the length
of the sticks, but generally are about nine or ten inches across.
An acquaintance of mine had trained some wild birds, which
at last bred regularly in captivity. These birds were well
supplied with an abundance of material for their nests
and always selected in confinement such as described above,
and making a nest about nine inches in diameter.

The height of the nest varies. It may be as low as six
feet or all of sixty-five feet from the ground.

The position of the nest varies greatly. Often the nests are
well out on slender branches and in dangerous positions,
considering the slightness of the structure. When a rookery
is revisited, nests may be found in all manner of situations.
I have found single nests built in small trees next the
body of an oak tree, and at a height of only ten feet, and again
have seen nests forty feet up in thick stumps.

Merrill, W. B. Pigeons (1907) p. 205, Potham to Deane, Dec. 17,
1896. I have seen them many times building nests by the
thousand within sight, both male and female assisting in
building the nest. I have counted the number of sticks
used many times; they number from seventy to one hundred
and ten, sometimes as many as I have plainly seen the eggs
from the ground.

I visited a nesting month of Kielbena City, Wis., about twenty-
five years ago [1871], and there I counted as high as forty
nests in a scrub oak not over twenty-five feet high; in many
places I could pick the eggs out of the nests, being not over
five or six feet from the ground.
Nests

Harris, George H. The life of Horatio Jones. Publ. Buffalo Hist. Soc. 6 (1903) 449. Re. nesting in the Benneville in 1782.

"The birds had exhausted every species of nesting material in the vicinity, including the small twigs of the trees, and the ground was as bare as though swept with a broom."


"The heights at which the nests were placed varied from 7 to 30 feet. They were all much more substantial than the published accounts had led me to believe. In fact they were more frail structures at all, but were so compactly built of twigs that one could by no means see daylight through them."


46 (1932) 28. "The base of the coarse nest consisted of small pieces of sticks on which leaves and feathers were laid, then some moss, and lastly a little down. The centre of the nest was not much higher than the rim."

Ridley, Dr. Robert Morris. Nesting habits of the passenger pigeon. Auk 11 (1894) 237-40. "Twigs are brought from a distance, 6-12" in diameter. Takes 4-6 days to complete a nest. Anne Mann counted 110 nests in a tree. in Emmett Co."

Juncos, Dr. Hudson. The nesting of wild pigeons. Can. Sportsman 4 (June 27, 1874) 195. Mississippi. "They made their nests of small dry twigs, bits of sticks, dry leaves, all kinds of trash found on the ground, and by the time they had completed their work, the entire bottom looked black and clear of litter as if it had been swept with a broom, not a leaf nor a stick was left, and to judge from the appearance of the scantly nests, the birds didn't have half enough."
The nests were small, only a little larger than a man's hand, and were constructed wholly of twigs. They were slightly cupped and were about two inches thick. The pigeons made no fires whatever in building; the pair merely flew up and down as they carried sticks to the nest, and they quickly finished it. Within two or three days after the building had begun, eggs would be found in the nests.

The nests were so small that the birds had no need to practice any nest sanitation. Even the droppings on the ground after the pigeons had left the city amounted to so little that they were hardly noticeable.


common to find 100 nests in a tree (near Buffalo, N.Y.).


1834. On nesting, a season or two previously, in the Tioga Valley at least 14 miles long and the whole width of the valley 1/4 to 1/3 mile wide. Thousands and millions of nests were seen on beech, birch, and maple trees, every tree of which contained several nests; and I counted on some of them from twenty to fifty nests. Never return to a nesting place the succeeding year.
Sawbwey, F.B. "The first and last journeys of Thoreau.
of slender hard twigs only; so thin that I could see the
eggs from the ground, and also so slight I could
easily get to it without upsetting it. The bulk of the
nest was six inches over; the ring of the concavity three
quarters an inch thick, but irregular. At first (seeing
the bird fly off) I thought it an unfinished nest."
p. 102. "I came upon a third, fourth, and fifth nests of
pigeons, with young. - the fourth nest so high up (as a
lump-bornean) as in the former nests, say seven and
a half feet high, and all much more substantially built,
but made of the same sized twigs as the first one. The last
two nests were placed against the tree trunk above a
low branch or two."

Hatch, P.H. "Notes on Birds of Minnesota. (1872) p. 171. Sticks
carefully 2 large as a Pigeon stem or which were distributed
a scanty supply of twigs with a few leaves overlapping
the whole. Some nests had no leaves at all.

373. The nest is 'constructed of twigs and leaves.'

Schwager, Unpublished manuscripts by Estes Matter... 55 (1938) 475. "They build their nests with little
sticks laid all round one another, at such distances,
that while they are so near together, as to prevent their
eggs falling through, they are yet so far asunder that
their eggs may feel the cool air coming at them. " The
reason for this being that their bodies are much hotter
than those of other birds, so that the eggs would be
added by the heat were it not for the cool air.
Nest 

Merriam, C. Hart. Ed. Eaton, Vol. 1, p. 383. The nests found in Herkimer Co. N.Y. The height at which the nests were placed varied from 7 to 30 feet. They were all much more substantial than the published accounts had led me to believe. In fact they were not frail structures at all, but were so compactly built of twigs, that one could by no means see daylight through them.
French p. 241. John H. Chatham, "... but a few scattered birds would nest alone, or in pairs, miles from the general nesting."

Butler, James W. Birds of Indiana, Indianapolis (1898) 761. "The quack duck went north into Michigan and other northern states to breed... but many had throughout our State, singly and sometimes in colonies, in the nests."

Dury, Charles. The J. pigeon, J. Lin. Soc. Nat. Hist. 21 (1910) 53. "Some of these birds nested in the great woods... west of Mill Creek, opposite to what is now Elmwood Place. I have shot squabs, two-thirds grown that had been hatched there, as late as the year 1875. The pigeons that nested in these woods were not numerous and much scattered over the woods. They usually make their nests high up in the tallest trees."

"On this wood (then called Estes Wood) I have raised young pigeons in September, nearly one-half grown that had been feeding on june berries... The size of the birds and the dullness of the season led me to the conclusion that they were of a second brood and that they were double brooded."

Ross, R.D. Our bird days. Dover Ann. 1 (July, 1895) 78. Came to Kingdom, Green Lake Co., Wis., in 1854. Pigeons nested in considerable numbers... in nesting time it was far easier to find pigeons' nests than those of the mourning dove. Found two eggs in a nest more often than one..."


Bryant, C. A. New passenger pigeons. F. J. 58 (April 19, 1913) 444. In the late 1890s there were two nestings of several hundred "near his home in northern Mich."
Nesting, single pairs, etc.  
The Captain: Pigeon shooting in the early days. F.S. 5, 68 (April 27, 1907) 656. Pigeon flights did not occur annually but usually every other year. During intervening years they were found in small numbers and nested.

Pennsylvania, Montrose Register May 8, 1829. Re nesting in Susquehanna Co. 10 miles southwest of Montrose. "The encoun-
terment is upwards of nine miles in length and four in
breadth; the lines regular and straight."


[5.13]
Scharff, E.H. P.p. in N.W. Pa. Cardinal 5 (1939) 27. Mr. Civett said that, even in summers following springs where the big
florons did not nest here, a few birds would be about the
woods. Two or three could be found in almost any swamp
in the river valley during midsummer. The summer birds
never nested, even though a small part of them were adults.
There was hardly a summer day when a person could not shoot
a few pigeons in the woods.

Pennoch, C.J. Nesting & the p.p. ... in N.Y. Chick 29
(1912) 238-9. A few pairs found nesting near
Morse R. Herkimer Co. N.Y. May 17-19, 1878.

523. O. W. Nash, M.B. "They do not in this locality build in
colonies, but place their nests singly, usually in small oaks,
the males at the time the females are incubating keeping in
small cloths." At Portage La Prairie,
Nesting

"Nests were prepared...as soon as a colony had gathered in one spot. Other birds assembled in other streams near the first colony, until a city extended forty miles or more, along the chain of hills from which the streams flowed to meet some river or larger creek. The width of the city might be two or three miles or much more, sometimes twenty miles. Between the wards of the pigeon city there were avenues in the forest where no nests were built. These might be one mile or five miles wide, so the actual nesting colonies occupied only 3 per cent. of the townships and counties the pigeon city was built across, sometimes much less than 5 per cent."

French, p. 31. William French. "When building their nests the parent birds selected a clump of evergreen trees - hemlocks and pines - by a little stream, with rising ground on the east side, building nests in all the strong limbs and branches, except a few near the top for the nests of those not sitting on the nests, and even building many nests on the branches of the deciduous trees that were standing among the evergreen trees within the boundaries of each colony of nests...the nests of their city and all trees were loaded with nests, so that branches broke down, thus came crashing to the earth and the nests of eggs and young birds were destroyed."
Their colonies were generally regular in the border lines, being parallelograms, squares, and circles, even to leaving the branches from occluded trees that were outside the boundary line. Here the nests; while inside the boundary lines the branches were all covered with them, except for a few near the tops of the trees upon which the male birds roosted to guard the females sitting on the nests below. The venerable Daniel Otis of Snyder county, has been frequently quoted in the fact that "The nest building was arranged with military precision."
French, p. 58. C. W. Dickens. "When feeding the young, the old bird draws head and neck down close to the body, opens mouth wide, then the young bird sticks its head down the old bird's throat and eats crumbs from the parent's crop." p. 59. "The birds built nests in every tree that stood in the vicinity the nesting owners. Undoubtedly there were three times as many nests in a hemlock tree as there were in a hardwood tree. We counted fifty-seven nests in a large bird tree." In hemlock nests were hard to see and count.

p. 59. C. W. D. "When food was plentiful they have been known to nest three times in a single season. First, in the latter part of March; second in the early part of May; and third about June 10. When they came here to nest they were scattered over three or four counties, roosting wherever night overtook them; but for a night or two before they began building nests, they roosted in one large body."

"Another sure sign was the little white strings that came from the front end of the beak and connected with the crop."

p. 67. French. "The cushiony down of passenger pigeons at breeding season expanded into a visible white string from the breast to the curb joint, or side of their feathers [67], having like the bridle reins of a horse in motion. By this mark the hunters knew a nesting bird at a glance, even in flight, when the pigeons had returned and assembled at their nesting colony before nest building began and until the squaw who had been abandoned to hunt their own food."


"Nesting at Connersport in 1856. I think. "This shuffling of the ground of nuts ... was a surprise to me, as I had been informed by persons preferring to know that the old birds never picked up the nuts from the ground under the trees upon which they build their nests but left them for the young birds when they left their nests."
From what was going on around me, it was evident that no such surprise could be attributed to the pigeons. 

But from this we can see the ground, and there were in search of dry twigs with which to construct their nests. Whether the male bird assisted in building the nests is not clear, but it seemed they were from the skill and dexterity with which they were being finished.

It was noticeable, however, that the males seemed to get more time than the females, to sit around on lower branches of the trees, as if in quiet contemplation of what was going on. This made them an easy mark for gunners.

In going for food, females flew higher than the males.

Thus演变 to obtain quails. So rapidly they came to maturity there would be shot one or two days in which this could be done.

On returning from feeding, the pigeons would not proceed immediately to feed the young birds, but sit around on the branches of the trees—usually overnight at their roosting place.

All the young pigeons seemed to leave their nests about the same time. At first their flight was quite near the ground. People could take advantage of this, and station themselves on the brow of the hill, with long flexible poles, and whip into the low-flying flocks, killing in this manner many birds.

Nine or two days after my trip to the Drangman River nesting place, the squawks left their nests—full-fledged pigeons. 

The turn squawks apply to them no more. The old pigeons had started in their migration. The young birds stayed two or three days longer; by short flights spreading over quite a large extent of the adjacent territory, to gain strength and facility in the use of their wings before attempting the long, sustained flight necessary to keep them in touch with the older birds in their migrations.
“Correspondent." "Pigeon nests." Penny Mag. 6 (1837) 4-5.

Re nestings in Penn. & N.Y. "In case the temptation is exceedingly strong, the old birds will sometimes nest and breed again; the place they select being generally along some ridge or eminence, where the branches of every tree become literally loaded with their rudely-constructed nests."

Ames, A. H. Breeding the Wild Pigeon. F. & S. 56 (June 15, 1901) 464. Letter from Prof. C. O. Whitman, May 20, 1901. "They lay only a single egg at a time, but hatch in twelve and a half days, and lay again by the time the young is two weeks old."

Bent, F. Brewer & Hedley. Vol. 3 (1874) 368-74. Great numbers arrived in eastern N.Y. early in March, 1872. "As early as the 10th of March they were met with. To have in their nests full-grown eggs ready for hatching. Have several broods in a season."

Biermann, J. H. Recollections of the passenger pigeon. Nurtler 1 (1906) 20-1. "In my boyhood days, nearly every time we had a flight of Passenger Pigeons, they nested in the Neversink Valley of the Catskill Mountains. They did not come every year but would usually come every alternate year."

Fiske, Z. M. Expeditions ... 1895-6-7. Vol. 1 (1895) 212. Nesting on islands in Miss. R., Pike Co, Ill. April 28, 1806. Rare case of nesting on islands. Squaws after leaving nest would be forced to live on their own fur until they could fly."

Barrons, W. B. Michigan Bird Life. Ewing (1912) 238-51. "The species was always partial to hardwood growths, and a large "nesting" or "hoot" as it was often called, was almost always located in or near an extensive area of hardwood timber where food was abundant. When a nesting tract had
Nesting

been selected, however, the pigeons used trees of every kind -
beech, maple, birch, oak, tamarack, cedar (arbor vitae),
sumac, pine, etc., and nests, or even a hundred nests
were placed in a single tree, sometimes only a few feet above
one's head, but more often at heights of twelve to fifty feet.

"Studies of the large breeding places ... show that at least in
Michigan nesting began frequently by the middle of April
and lasted normally until late in June or even into July;
"It was the period of incubation being less than three weeks, and
"the young remaining in the nest only about two weeks, it seems
"evident that many of the birds, if not all, must have reared
"at least two broods."

"Many writers claim squabs was pushed from nest by parents.
"Meanwhile the parent birds were said to move away to a
distance of twenty to fifty miles and at once construct a new
nest where another squab was reared. However this may be,
"it has been repeatedly observed that for many weeks
"after a nesting was founded it continued to grow in
"extent, spreading more or less in all directions but usually
"becoming an elongated area, from two to four miles in
"width and often twelve to twenty miles in length, some-
times even larger."

[Editor, Louis B.] Pigeons by the millions. N.Y. Times May 9, 1886.

Tom q'ty turuo "sticks and moss." Takes 3 days to complete nest;
and 18 days for egg to hatch. Young fed for 18 days. Becomes
"as round and fat as a butter ball, and is left to itself by
"the parents ... They cannot fly for two or three days, and
during that time they stumble and stagger about like
"bipody men ... with 3 a dozen. A pair 2 pigeons hatches three
"broods before the nest breaks up.

Byron, C. A. The passenger pigeon. P. S. S. (April 19, 1913) 515;
"Southern Mid."). Nested every other year or account 1 tree mast
"but I never knew them to nest twice in the same place."
Nestings

Roney, H. B.  A description of the pigeon nesting of 1878 ...
Chicago Field 10 (Jan. 11, 1879) 345. "nestings have been
established in Michigan, and by a noticeable concurrence,
only in even alternate years, as follows: 1868, 1870, 1872,
1874, 1876, 1878,"

p. 345. "No less remarkable in the wisdom with which the nesting
places are chosen, they being always in the densest woods, not
in large and heavy timber, but generally in smaller trees with many
branches, cedar, and saplings.

p. 346. "It is well known that different sections of pigeon nesting
vary in their degree of advancement. Every few days a new colony
of birds arrive, at the nesting, build nests or occupy deserted
ones, and brood their young, which are left as before mentioned
when one week old, and the old birds move over a mile or
two to another portion of the nesting where the work of repro-
duction is repeated. Consequently in different parts of the same
nesting some of the birds may be seen building nests, others
are brooding their young, while still others are feeding half-
grown fledglings."

on Mose's ridge, 20 miles from Cooperstown, N.Y., especially as regards
parents changing place on the nests.

The single egg is laid 3 to 4 days after the commencement of nesting. As
soon as the young birds are able to leave the nest and commence
feeding on the ground in the nesting, the old birds immediately
Nesting

forsake them, move again on to the borders of the snow
and start another nesting, in five or ten days the young
birds will follow in the direction of the old birds. Very fast
as leaving new set in 10 days; when they start on northern
flight, they are very lean and almost unfit to eat.

Deane, R., Some notes on the ps. pigeon in confinement. Acad. 13
(1896) 236. Breeding.

Butler, Amos W. Birds of Indiana. (1898) p. 766. Rev. H. D.
Johnson, a native of Franklin County, ... informs me that, when
as boy, some time between 1820 and 1830, he remembers going
with some men to a "pigeon roost," in Springfield or Bath
Township. He remembers its site was marked by an extensive
windfall. Here, upon the bushes, the pigeons nested in
countless numbers, and the object of their visit was to catch squabs.

Fowle, Paul. The great north west. (1904) p. 218, ... as far
as I can learn, never return to an old nesting place —
at least until many years have elapsed.

Bundting, F. L. Birds of Shiocton ... Trans. Wis. Acad. 10
( 1 ) 106. In 1882 and 1883 nested in small colonies
along Wolf River in maples 20 to 30 feet above the water.

Bryant, C. A. The passenger pigeon. F. 48, 80 (April 19, 1913) 575.

"In early days, folks calculated on a pigeon crop, as much as
any crop, every two years. Although the pigeons went over on
their migration, every year, they only stayed one other year
in accounts of the next, or shank, as we used to call it, and
their nesting in the locality [Southern Mich.], above referred
I was every other year, pretty sure ... and when the
country got more settled, they went further north."
Nestling

Harrer, George H. The Life of Koratio Jones. Pub. Buffalo N.Y. Dec. 6 (1903) 450. Nesting in America in 1782: "A little before noon they began to return to feed their young; then arose a deepening chorus of shrill cries as the awkward younglings stood up in the nests with wide open mouths uttering their calls of hunger."

Montrose (Pa.) Register, May 8, 1829. "The encampment [nesting] is nine miles in length and four in breadth; the lines regular and straight... They take their turns regularly in sitting and in feeding their young; and unless any of them are killed upon their nests by the sportsmen, alters immediately supply their places."

Nowitt, Henry. "A short history of the pigeons. Cam. Field's Nat. 46 (1932) p. 28 "it [nesting] was always exhibited close to a river or creek and where fir trees were numerous."

"Since the nest was never placed on the upper branches of trees, where the wind removed them most, nor near the outer end of long branches; but near the trunk the nests were placed very close to each other."

Knapp, Henry. The wild pigeon. Ann. Sportsman 4 (1874) 387. "I have known two reasons that the scarcity of meat was so universal that there was no general spring nesting; in one instance in Wisconsin they fed on spring growing wheat, oats and other spring grains that the farmers spared."

Knapp, Henry. Statements about the wild pigeons. F.S. 12 (1879) 146. "... neither young birds nor eggs are allowed to die of hunger or spoil in a pigeon nest, if the parent bird is killed. The young and eggs are fed and the eggs hatched by foster parents."

"..."
Nesting


Allen, J. A. Catalogue of the birds found at Springfield, Mass. Proc. Expt. Inst. for 1864, 4 (1866) 76. "Counts but one egg at a time, but breeds two or three times in a season."


"The nesting is conducted on the 'free love system.' It is confirmed by old pigeon hunters, who have studied their habits for years, that the female may sit on one nest in the morning and another in the afternoon, the birds never tending their own young."

"At the nesting two years ago [1874] near Shelby counted as high as 36 nests in a single tree."

Knepper, Henry. The wild pigeon. Am. Sportsman 4 (Sept. 19, 1874) 387. "The time from the building of the nest to the hatching of the young depends sometimes on the weather. If it is cold it may be fifteen or sixteen days, if quite warm thirteen to fourteen days, the weather will make one or two days difference. The same time is necessary for the young birds to mature. Twenty-eight to thirty-one days from the building of the nest to the leaving of the old birds."

Maas, C. T. Die Wandertauke. Jahresber. Naturhist. Wör., 1880-1, p. 44. Pigeons came to Wisconsin in 1878. They settled down in the vicinity of Madison or Richmond, not were prevented from building here by excessive persecution, and proceeded to the islands in the Mississippi at the lower end of Lake Pepin, where they laid their eggs in large numbers on the sand and even on the ground.
Nesting.

French, p. 226. C. K. Suter, London. p. "Nests on high limbs of tall trees looked not unlike black patches of moss and a certain species of dark colored fungus which often grows on the trees and some other trees. A row of nests was sometimes 30 feet from a single limb."  p. 226. "All the nests I ever saw, were in beech woods, and mostly on beech trees."  p. 241-2. John H. Chatham. "A pair of pigeons would build a nest in a day or two, at most. Sometimes the weaver was against them, and an egg had to be dropped before a nest was completed. Others were spoiled or shut before it was ready. Hens that laid only their two eggs in the nest were knocked out by the intrusion of other birds weighing down the limbs on which the nests were built. Wind storms did a considerable part. The nests were generally about twelve feet above the ground, and from that up to about twenty-five feet. They never went out into the high tree tops to nest, probably on account of wind. During the nesting period they never fed nearer than ten miles from the nest, but fed was kept in reserve for the squabbs.  p. 241. The nesting was built in compact form, with a certain length and width. So closely did they emply with this method, that trees on the other side of the nesting after would have from twenty-five to fifty nests on the inside and not a single nest on the opposite side of the tree, but a few scattered birds would nest alone, or in groups, miles from the general nesting."  

Dickie, George Henry. History of the Mission. Part I (1994) 92. "When the Missionaries arrive, that the young pigeons are nearly fledged, they cut down the trees with nests, and sometimes get two hundred young from one tree."
Nestings.

Engles, James. The pigeons days. Grand Rapids (Mich.) Press. Oct. 28, 1933. Shelby nestling 1876. "I have seen as high as 300 to 500 nests in a tree. In three days time the nests were all built and two eggs laid. In 12 days they hatched. In 30 days after nesting started nearly all the young had left.

"R": Among the pigeons. Mil. Sentinel May 3, 1867, p. 1.

The nesting of nesting near Grand Haven. "... even at that early hour (half past three) large flocks were passing over the town and river within easy range..."

Country around Grand Haven "is covered with a heavy growth of timber, mostly pine;... monstrous sand hills..."

"The timber here is mostly oak and pine, and very high, but the almost total absence of under-growth would afford good walking but for the number of dead and fallen trees scattered along the route." Any sandy soil with no surface indications of moisture.

Pohagon. The wild pigeons. Chautauquan 22 (1895) 204.

"When food is abundant they nest each month in the year."

Between 1840 and 1880 wild led many breeding places in Illinois, Indiana, and Michigan that were from 20 to 30 miles long and 3 to 4 miles wide.


"The ground was covered with droppings, unhatched birds and broken eggs, the smell from which was most offensive.
Nesting

Taylor, R.C. On the geology ... Allegheny Mountain ...
Mag. Nat. Hist. (London), 9 (1836) 73. "I am informed that the various processes of building the nests, of incubation, and of the flight of the young birds, and the departure of the old ones, are remarkably simultaneous. The young pigeons, or 'squabs,' appear to quit their nests, and essay to fly, nearly all within a day or two of each other ... As was stated, that comparatively a very few young birds were taken even on the third day after the general flight took place."

Hammond, S. N. in: Search for Sketches Franklin Co. [N.Y.]. (1918) p. 213. Nesting near Tupper Lake in 1853. States that there were squabs 'from the little downy thing just escaped from the shell to the full-grown one just ready to fly away.'

Sutton, B. M. Birds of Pennsylvania ... (1928) 117.

Nelson Rehe: "In each nest were laid one or two eggs. When three eggs hatched and the squabs reached a little size, two more eggs were laid, which were hatched by the heat of the first two squabs. Thus the young were in assorted sizes." Formerly nested in his creole and at Windlock point.

Thomas, W. F. Wild pigeons. N.Y. Sun June 14, 1881.

Rigol's nest four times a season, having one egg to a nest."


Description of squabbing.

Nesting: "It is universally asserted in the western countries,
Nesting
that the Pigeons, though they have only one young at a time, breed thrice, and sometimes four times, in the same season; the circumstance already mentioned render this highly probable. It is also worthy of observation, that this takes place during that period when acorns, chestnuts, etc., are scattered about in the greatest abundance, and swallowed by the frost.

Meredith, W. B. The p. pigeon (1907) p. 206. See under "1864"

Pokagon's statement of a large nesting in which the birds destroyed their nests.

Dümling, Hermann. Illustrirte Thierleben. Milw. (1879) p. 132. At a nesting in Ozaukee Co. a friend counted 140 nests in one tree.

Morris, F. C. A natural history of the nests and eggs of British Birds. London Vol. 2 (1864) 103. "It would appear that the nest... is put together in a single day, and that the young are hatched in sixteen days; both male and female assisting in making the nest, the former bringing the materials, and the latter arranging them, and also in the work of incubation. Only one egg.

Nesting


p. 47. June 19. "Speaking of wild pigeons, he says he finds from five to three young in its nests."

p. 96. June 6. Sketch (in original notebook only). I met in broad fork of the road west 10' from ground.

p. 101. "By the lake I saw a scarlet oak, sight set up. I found a pigeon's nest like the former one, but more stable, containing a young bird three inches long, of a dirty yellowish and leaden color, with pinfeathers and with a great bill bare at the base and a blackish tip. Another young bird slipped to the ground flitting as if wounded, two or three times, as it went off amid the shrubs."

Bremner, Henry W. A Pennsylvania Swan Hunt. Middleburg, Pa. (1915) p. 52. Statement of Daniel Ott, Selins Grove, Snyder Co., Pa. "The nesting grounds of the wild pigeons were arranged in military precision. Sometimes they were in the shape of squares, other times circles. The trees marking the boundary had no nests on the branches outside of the line. It was strange to see trees full of nests on one side and with none on the other."

Wilcox, Otta S. Personal recollections of the p. pigeons. Arch 51 (1934) 159. "the hills roosted in bed regularly about five miles south of Northport, in a tract of timber 22 1/2 miles long and in width from one to 1/2 to 3 miles, lying between the lakes Isle La Motte and Grand Traverse Bay. They occupied the site from their first arrival until long after the young had been raised and had flown."

"The great feeding flights were from daybreak to about..."
9 A.M., the return being made irregularly during the balance of the day while birds could be seen flying both ways, to and from the nesting place. There was always a large homeward flight about sundown. The birds generally avoided trips over large bodies of water and it is probable that balance County pigeons confined their feeding flights entirely to the land during their summer stay as their breeding places.

p. 166, "Birdlime covered everything and lay deep on the ground. Pots burning sulphur-smeared their shallow furners here and there suffocating the birds. Animals in the forms of men wearing red, tattered clothing, heads covered with burlap and feet encased in red shoes or rubber boots went about with sticks and clubs smashing off the birds' nests while others were chopping down trees and breaking off the over-laden limbs to gather the squabs. Pigs turned into the road to platter on the fallen birds added their squeals to the general clamor when stepped on so backed out of the way, while the high, cackling notes of the courted pigeons, a bit husky and hesitant on things short of breath, combined into a peculiar roar, unlike any other sound, and which could be heard a mile away.

"Of the countless thousands of birds bruised, broken and fallen, a comparatively few could be salvaged yet wagon loads were being driven out in an almost unbroken procession, leaving the ground bare covered with living, dying, dead and rotted birds. An inferno where the Pigeons had builded their Eden." — Sic!
Stoddard, Herbert C. *The bobwhite quail*, N.Y. (1931) p. 20. Earliest nests in which nests were taken were on April 28. The most important nesting months are May, June, July, and August. Columns 2-4.

Barrows, Michigan bird life. P. 721. June. "Ordinarily the eggs are laid from May 20 to June 10." p. 723. Robin. "In the vicinity of Grassville ... the first nests with eggs may usually be found about the middle of April.


The nest is placed near the trunk of the tree, rarely in a pine, not near the ends of the limbs since the wind would carry away the nests and tear out the egg. "I have been in nesting places where there were hundreds of nests in sight and never saw a nest with more than one egg in it."

Haddock, James. Will pigeons play at? Am. Sportsman 4 (Sept. 5, 1874) 363. Dowagiac, Mich. Agrees that but one egg is laid, but thinks p. nests 4 to 8 times a year. Cocks leave in morning, returning about 9.30. Hen then leaves returning about 2.30 or 3.00 P.M. The male then leaves and returns in evening. Thinks female goes 40 miles for food. "With us the old birds leave all the "nest" as food among the nests, and in close proximity to them, for the young,
Wahaza." [ Nesting in Benzie County, Michigan]. Chicago Field 13 (April 24, 1880) 167. Detroit, April 16. Heard that H. T. Phillips had telegraphed his partner that the nesting was broken up by shooting. "If such is the case, it is the first time I have ever known such an occurrence, and I have lived in this state forty-two years, and have seen shooting right in the heart of the nesting. . . . Surely the magpies have everything on their side, as far as law is concerned, for the law prohibits shooting within five miles of a pigeon nesting."

Knowlton, Frank H. Birds of the World. N.Y. (1889) p. 426: "They never fed near the nestling, leaving that for the young, but often went a hundred miles or more away."

Nice, Margaret Morris. A study of the nestling B. Mourning Doves. Arch 40 (1923) 44. "Mourning doves usually begin nesting in April throughout most of their range. . . ." Rendive swamp middle of March in northern states.

Stedman, O. B. Deerfield, Wis. In lith. Feb. 21, 1938. In the 1850' s there was a nesting in a small grove of elm at Clevedon 1/2 miles north of Deerfield. The bandits drove spilling the eggs by the thousands. People from towns around Wisconsin went there to get the eggs. "We distressed birds flapping around, crying trying to rebuild."
Feb. 17, 1930. In 1850 settled in the timber town of Rushford, Winnebago Co., a few miles north of Ripon, Fond du Lac Co. In the morning they came from the north in scattered flocks, fed on the prairies to the south, evidently on wheat [Fond du Lac Co.]. About six in the afternoon they all arose like a great cloud and began their flight to the north. Continued streams of birds until long after dark. Think they nested on Pigeon Creek, northern Waupaca Co. Where there were great rookeries in the '60s. They were about 60 miles north of the nearest Wis. prairies. Continued streams of birds until long after dark.
Featherstonhaugh. N.W. Excursion through the Slave States. Vol. 2 (1844) 11-12. 'I remember once, when amongst the Indians, seeing the woods loaded from top to bottom with their nests for a great number of miles, the heaviest branches & the boughs broken and fallen to the ground, which was strewn with young birds dead and alive, that the Indians in great numbers were picking up to carry away with their horses: many of their dogs were said to be gone mad with feeding upon their just slaughtered remains.'
Nestings (sites chosen).


... Nesting along Platte R. in Mich. "Cedar trees along the river bottoms seem to be preferred, but when the nestings are large, beech and other trees are occupied. From half a dozen to fifty or sixty nests are built in a tree.

Kerth, Morris. Nesting of the wild pigeon. F. 95. 43 (Aug. 9, 1894) 93. ... the last nesting of any size [Michigan], where the pigeons nested in numbers, was visited on May 9, 1880, and occupied cedar trees, while the last nest that met my notice was placed 40 ft, from the ground in a tamarack in the woods ... June 1, 1884."


... In Wisconsin, scrub oak (Quercus ellipsoidalis) and dwarf pine (Pinus Bankeriana) are sometimes used for nesting.


"The woods selected by this colony is mostly pine, interspersed with a few beech and maple."


Dubuque Co. Iowa. "... excepting possibly the gray squirrel, they were the most abundant small game of the woodlands during the season from April to October. The nesting time was no collective habit ... perhaps the favorite sites were among the thick and thorny branches I found trees, growing about the woodland margins and within cavities too wet for ordinary forest growth; sometimes they were within the forest at the base of one or two large branches projecting from a tree trunk; again they were in broken stumps, some yards high; sometimes they were in crotches or even on the surface of projecting rocks; and rarely they were on the
Nesting (sites chosen)
ground in hilly places I saw shrubbery. They were never
more than fifteen or twenty feet from the ground...two
white eggs (rarely one) was laid...more fed by the old birds
as they perched on branches...[evident that he made no
distinction between mourning doves and passenger pigeons].
The nests were situated at varying heights from the tops of the
trees to as little as twelve feet from the ground; but the greater
number were high in the trees. As a rule they were built close to
the trunks or solid limbs. Sometimes they were located in the
thick, bough-like growth that occasionally sprouts from the trunks
of yellow birches. Mrs. Asiatt never found any trees that had
died as a result of the nesting pigeons in them.

The birds choose chiefly hardwood timber for their cities. She
preferred to build their nests in hardwood trees and in limblocks
of open growth - never in thick limblocks. Mr. Asiatt never saw
a nest in a white pine (there was not a great deal of pine in the
hills, and the trees were so tall that the pigeons did not favor them).

The pigeons cities were usually in the highlands, at the heads
of the streams, though large areas of occupation often extended
into and across hollows and little valleys.

P. 33: "When the old birds decided the nesting city, they left in great
waves. Mr. Asiatt has seen them fill the skies for half an hour,
passing over Smilwill in a stream as wide as the valley. In places
the flock was so dense that one could not see the sky above. It was the
flock of the parent birds, but not the entire population of the city, that
so left at one time, for the birds that had been late in beginning
to nest were not yet finished. The birds that were leaving for good
and all went out with the daylight flight, and those that were
still nesting dropped out to feed and return to their young,
Nesting (sites chosen)

238-9. Found a few nests, the middle of May, 1878, in a clump of spruce along Moose River, Herkimer Co. Mentions a nest with one egg, in a spruce, on a horizontal limb about 30' from the ground and 8 to 10' not from main trunk.

Engleb, James. "The pigeon days." Sand Rapid Press Oct 28, 1933. Shelby nesting of 1876, "... they built only in the best of him two nests on maple and beech. They did not build in pine, cedar or hemlock."

Tom Tramp, a pigeon roost. Read to them 8 (June 3, 1876) 149.

Shelby, Oswego Co. White nesting. "This felt was composed entirely of hemlock and pine timber, with scattering beech and other kinds of wood, and nearly every tree had from three to twenty nests on it."

Finley, W. H. The passenger pigeon. Can. Sportsman & Nat. 8 (1893) 242-3. Nesting in 1867, in 1868 south of Aldona, Clinton Co. N.Y. "The nests were built in a heavy hardwood bush, each tree having from six to fifteen or more nests in it."

Hammond, S. H. An F. J. Scaron, Hist. Sketches of Franklin Co. [N.Y.]. (1918) p. 213. Nesting near Tupper Lake in 1853. "The trees were most large growth, being mostly of spruce and stunted birch, hemlock and elm, but every one was loaded with nests, one every branch, every branch that would support one..."
Nesting (Continued).

Kalm, Peter. A description ... Aug 28 (1911) 61. "They build their nests in high trees, pine trees as well as deciduous ones; often as many as 40 or 50 nests are to be found in the same tree."

Caro, C. F. Passenger pigeon ... nesting in Wisconsin. Mo. N. Nat. 1 (1890) 9-10.

"In the southwestern portion of Waupaca County, along the Wolf river is a vast tract of low land covered by a forest of swamp oak, ash, elm, etc. The tract contains many marshes and sloughs. This section during a wet season is mostly covered with water and is inaccessible. Here in early June, 1885 I found scattered pairs nesting, and only a single nest in a tree. [Conditions much like those described by Kalm]."

Nehring, Henry. Birds of Wisconsin. Carminel ed. Mil. Sentinel April 21, 1898. Town J. Hermann, Sheboygan Co. "They seemed to prefer nesting in the skirts of young pine growth; but their nests were also hatched out on trees in the meadows; I have found as many as twenty and thirty of their nests built up 8 or 10 ft. above the ground."

S. M. [Pigeon]. Richland Center [Wis.] Observer Jan. 17, 1878, p. 1. In May, 1866, near Woodstock, Richland Co., Wis. the pigeons nested in the alder swamps along the West Branch of Pine River."
Flindley, Jacob. *Journey to attend the Indian treaty, proposed to be held at Sanduskey, in the year 1793.* Mich. Hist. Colls. 17 (1891) 575. Wood creek, near Oleanida Lake, N.Y., April 13, 1793. "The banks abound with its lofty timber, sugar trees, elm, some large, and shell-bark hickory, in which the pigeons, innumerable, build their nests."
Nesting (twice or more).

Wilde, Morris. Nesting of the wild pigeon. E 45. 43 (Aug. 4, 1894) 93. "I cannot dispute, and can say that do not doubt, that the wild pigeon may rear two or three young during the season." An old trapper told him the pigeons lays but one egg at a time but when the first egg is hatched, a second is laid and the young assist in incubating.

Cassin, T. M. Among the pigeons. E 45. 10 (June 13, 1878) 359.

Woodstock, Ohio, April 17. Returned from a short stay at the nest; near Marionville, Forest Co., Pa. Arrived on March 20 when the birds were not quite done building. On Saturday, April 6, "they had all hatched out, and squabs were plenty large enough to take from the nest, as the old birds had filled them up with fresh seeds preparatory to leaving the little fellows to look after themselves. Now this seems to me to be a very remarkable feature in the wild passenger pigeons. I have often known of their nest a second time within a very few miles of their first nesting, but never before have I heard of their building their nests on what might be called the squab's feeding grounds." The oldest trappers from Sheffield never heard of the like before.


"Mr. Orvall doubted that the pigeons ever nested here twice in the same year, things some people believe that they frequently did so. The nearest approach to such a practice occurred when the birds,
nesting twice

... shot out... their original city... moved to another site some miles distant to re-nest... if another barrage & guns gave them no peace in their second nesting, they might desert it in turn before the young were raised.

p. 31. At every nesting there were late comers that nested at the edges of the city and thus extended it. New flocks continued to come in for about two weeks after the first to build their nests. He knew that the interval was approximately two weeks, because that was the length of the period when he found fresh eggs, ready to be laid, in netted birds. He said, however, that in 1870, the growth of the East Branch nesting continued for about a month.

Kalm, Peter, A description... And 28 (1741) 61. Some maintain that they raise two broods of young every summer.


p. 495. "They hatch every month." Flocks disperse to breed in pairs. Usually two young.

Wilson, A. Am. Ornithology 5 (1812) re Alps of Ky. meeting.

Pike, P. M. Expeditions 1 (1875) 212. April 28, 1806, Squeezing ten feet. Pike Co. Ill.

Vincennes.

Vincennes Gazette 2nd. May 1, 1858. Young hardly able to fly.
Kalm, Peter. 'Travels into North America,' 2nd ed. London, vol. 1 (1772) p. 103. "Instead of flax several people made use of a kind of hemp, or Cannabis, Apocynum cannabinum. The people prepared the stalks of this plant, in the same manner as we prepare those of hemp or flax. It was spun, and several kinds of stuff were woven from it. The savages are said to have had the art of making bags, fishing-nets, and the like, for many centuries together, before the arrival of the Europeans."

p. 112. Vol. 1. Apocynum cannabinum was by the Swedes called Hemp of the Indians; and grew plentifully in old corn-grounds, in woods, on hills, and in high glades. The Swedes have given it the name of Indian hemp, because the Indians formerly, and even now, apply it to the same purposes as the Europeans do hemp; ... sometimes the fishing tackle of the Indians consists entirely of this hemp. The Europeans make no use of it, that I know of."
Netts


Wide paths are made in woods in which are placed large nets in the shape of a bag and attached at the sides to trees. When the pigeons enter the net a cord is pulled that closes the entrance. Sometimes catch 500 or 600 in a morning particularly in windy weather.


The Indians catch geese, turkey and cranes with nets.

Wabre - Oennoisy, S. Relations of the mission of St. Joseph at Doogouan. Relations J 1671-72. Jesuit Relations 5-6 (1894) 49. Cayuga town on east shore of Lake Cayuga. "Many andares are set there for catching pigeons (Turles), from seven to eight hundred being often taken at once."


"Nets of bark twine were also spread for pigeons and quails."

Taylor, B. A voyage to North America ... Nottingham (1771) 37-8. 1708, Crown Point N.Y. "Vast numbers of these birds are taken in traps."

Josselyn: John. An account of two voyages to New-Englands, 1674. Boston reprint (1865) p. 79. "But of late they are much diminished, the English taking them with Nets."

55. Hacaron magicians forbid the people to gather a wild plant from which twine for their nets is made. (May have been Asclepias incarnata or Apocynum cannabinum. Later mentioned by Kalm.

Le Jeune,  Relation J. 1634. Jesuit Relations 6 (1897) 299. "During the winter they capture them in nets and under the ice. In this way they make a slit in the ice near the Beaver's house and put into the hole a net, and some wood which serves as bait..." (Montaignais).

p. 307. "Hares are caught in nets, or are killed with arrows or darts." p. 308. "Ils fermentent les lieurees au lacet..."

p. 309. "As to fishing, they use nets as we do, which they get in trade from the French and Hurons."


Ojibway. "The old men and those who can net or do not wish to go to war or the chase, make nets and are fishers." - In Pothier, Vol. 3, 33-4. Nets made of nettle or bark of white wood. (1753)

Saulteurs. [Sault St. Marie]. "They cross all these terrible rapids into which they cast a net like a sack, a little more than half an ell in width by one in depth, attached to a forked stick about 15 feet long." - In Pothier, Vol. 2, 60-61 (1753).

"For taking fishes in summer in nets, they make a broad path in the woods and attach to two trees, one on each side, a large net made in the shape of a sack well opened." - In Pothier, Vol. 2, p. 80 (1753)

Rac Pratz, Histoire de la Louisiane 2 (1) 179-80.
Re. Indians' fishing nets, "they are meshed like ours and made of line, the bark."
Corymgham who pigeons are trapped. F. 45. 11 (1878) 430. Disciplined & operated & met in Jefferson, Co., Wis., in 1872-3.

Nomenclature

Renwicks, Hist … Pigeons … Amsterdam 1(1873) 346-54.

"The name of this genus appears to have been derived from the Greek, (Ektopeion), which signifies "frequently changing place or habitation."


* Douglass, W. G. Synopsis … Vol. 2 (1755) 217. Palumbus migratorius Catesby

Chicago. Vol. 1 (1923) 245; [London (1761)].

Montreal, Canada, April 22, 1721. "They are commonly called turtles
due to their wood and other pigeons in Europe, sufficiently
to constitute a fourth species. They are smaller than our largest pigeons,
and have the same eyes and changing shades upon their necks.
Their plumage is a dark brown, excepting their wings, in which
there are some feathers of a very fine blue.


Type locality: "Ektopeion migratorius (Linnaeus), Syst. Nat.
ed. 12, 1: 1766, 285 (based on Palumbus migratorius, The Pigeon
of Passage, Catesby, Nat. Hist. Carolina 1: 1731, 23),"

Salvadori, p. 299. P. torquatus Aldr. = Columbia palumbus

Bonaparte, Charles. Observations on the nomenclature of Wilson's

Nomenclature.

Bennett, Charles G. A. Nomenclature, and comparative life., (1838) 41.
Ectopistes majoria, Sw. (Columba majoria, L.)
Ectopistes Carolinensis, Sw. (Columba Carolinensis, L.)
[May not have "minor" after E. Carolinensis, but he used it apparently for the first time for Morning Day, check.]
Woodhouse, S. W. Description of a new species of Ectopistes,
"Ectopistes marginella, minor" [W: Mourning Day].
Bancroft, O. The names of the passenger pigeons and the mourning dove,
Should be E. macrourus.
Pedro, James C. E. Check list of birds of the world,
3 (1937) 83.
Stephens, J. F. Shaw's general zoology 11 (1819) 94.
Synonymy and list of birds given by B. P. B, 1824.
Physiology.

Camp, R.R. *American Naturalist*. 1948, p. 267. Mourning Dove. "When an adult wants to eat, it raises its head from beneath the brooding parent and as the adult opens its beak, the young bird inserts its smaller one into the side of it. By rhythmically working the body and head forth and back, a motion which is reciprocated by the adult, the adult successfully ejects the food. The feeding time varies from about 15 seconds to one minute."

"It is a peculiarity of the entire pigeon and dove family that while drinking they keep the head in the water up to the nostrils, and take one continuous draught rather than raise the head at intervals to swallow as most other birds do."


size: 1/100" in length and 1/4626" in width. "Since there was a remarkable difference in shape, and the corfuscles of the Passenger Pigeon, as far as I have yet ascertained, are quite peculiar, since the singularly narrow ellipse which they present have not hitherto been found in the red particles of other species of Columbidae."

Shakespeare, Hamlet, Act II, Scene II

"But I am pigeon-liver'd, and lack gall

To make oppression bitter."

Burger, W. E. *Companion of the earthy content... Science*

46 (1917) 440. Romano-Pisano.


p. 273. "I canalicoli di Holmgren nel Colombo viaggiatore..."
Numbers.


Nuttall, Thomas. A manual of the ornithology of the United States and Canada, Vol. 1 (1832) p. 363. "Nearly, the whole species, which at any one time inhabit the continent, are found together in the same place."

Revoil, B. H. The hunter and trapper ... London (1874) p. 129. "An arithmetician of the district made a sufficiently curious approximative calculation of the number of individuals composing these extraordinary flocks, and of the enormous quantity of food necessary to their maintenance. Taking, for example, a column about nine hundred yards in breadth — which is much below the ordinary measurement — and allowing three hours for the birds emporing it to accomplish their flight, while the excess was five hundred yards a minute, its length would be two hundred thousand yards. Supposing, now, that each square yard was occupied by ten pigeons, we may conclude that their total number amounted to a billion, one hundred and twenty millions, one hundred and forty thousand."

Rycraft, W. P. A history of birds, London (1910) 135. "Among the land birds the only parallel is, or rather was, that afforded by the Passenger Pigeon."

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$1,493,176 \times 640 = 955,632,640$ acres.
Remnants of the typical family, where gray usually predominates. The head and neck are a specially bright shade of gray; the breast is suffused with the reddish tint, and on the tail some almost concealed patches of chestnut still exist.
Plumage, etc.

Pease, Ruthven. Albinism and melanism among North Amer. birds. N. A. R. Bull. 1 (1876) 32. "Among the Columbidae, P. migratorius is noted."

Davis, T. A. "Albinos." P. A. S. 2 (1874) 22. T. A. Davis, in exploring the Adirondacks of N.Y., mentions a white wild pigeon that came to his attention.

Pease, Ruthven. Some notes on the p. pigeon in confinement. Aug 18 (1876) 287. "We have taken immature birds, early in August, that were clad in the characteristic plumage which precedes the adult stage."

Ridgway, Robert. U. S. Nat. Mus. 40th Parallel. Part III. Ornithology, (1877) p. 596. P. jis. "Bill, black. Stomach, pinkish; iris, brownish, with a narrow outer ring of carmine; tarsi and toes, pale livid salmon-color, the scutellae more brownish; claws, blackish."


p. 30. Charlie Richins wrote that in a few cases, while wild pigeons were seen, one he saw in McKean County was dazzling in the winter sunlight, the snow-white body and red eyes and feet gave a marked contrast.
Plumage

Whitman, C. O. (1919) 25. The wild passenger pigeon [Columba livia] bears chequers closely resembling those of the chequered rock pigeon, in form, color, and distribution, p. 26. "As in so many other birds, the male makes the evident departure from original condition; the female occupies a lower plane; the young are nearly alike in both sexes and may be said to recapitulate ancestral condition with less modification than is seen in the adult of either sex."

In birds taken at random, 9 counts in the left wing and scapulars 90 chequers in a juvenile, 51 in an adult female, and 25 in an adult male. This is pretty conclusive evidence that chequers are, or have been, disappearing in the species. Not only the number but also the size of the chequers has been reduced. In the female the chequers, on the most part, two or more times as large as in the male. The reduction in both respects has been greater in the anterior than in the posterior half of the wing, and greater along the lower edge than in the middle and back regions."

"Glancing at the wing as a whole, in both old and young, it is plain that the process of obliteration is in progress over the entire chequered area. The elongated, sharp-pointed marks of the earlier pattern have rounded tips in the adult; the posterior bar is roughly emarginated; the number of chequers is reduced by half or more; and some of the remaining ones are but little more than mere dots... (p. 28)" The directive is as certain, as that the adult male stands in advance of the adult female, and still more in advance of the young bird."
Population

Boothby (1893) 100 billion
French (1904) 45
Mersham (1907) 123
Allen Brothers
Prices

Wild, Etta O. Personal recollections of the passenger pigeons.

Chicago Tribune, Sept. 7, 1874, p. 1. "On the days when boats came into port and the shipments went out, Father sold additional dozener to the boat's cook for use on board, receiving the standard ten cents per dozen for them, even when there was not an oversupply and only five cents per dozen for them when they were offered in overwhelming numbers."


Holmes & Scarr, 121 Smith Water St., Chicago. Field and Stream 3 (March 18, 1875) 61.

Pigeons (F. Light) 1.25 @ 150 per doz.

... (Dressed) 1.25 @ 150

... (Feathered) 1.25 @ 2.25

Live Pigeons 1.25


Wild Pigeons, live 2.00 @ 2.25

... dressed Feathered 1.00 @ 1.25

Editor. Name in New York market. F. S. 23 (Sept. 11, 1884) 125.

"Wild pigeons cost 2.00 a dozen; stall-fed pigeons are 3.50 a dozen."


Editor. [Wild pigeons]. F. S. 6 (March 30, April 6, 1876) 122, 138.

On March 30 pigeons were quoted at 2.50 a dozen in the N.Y. market and a week later at 1.50 due to a more plentiful supply.
Price


"I have bought at Boston a dozen of pigeons ready pull'd and garbled for three pence."
E.T. Martin, Chicago. Field 18 (May 22, 1880) 227. Traverse City, Mich. May 3. "The stock of live birds put up has been very limited. I think 24,000 will more than cover the entire amount. Of these I have secured a light over 14,000; ... Unless we get the looked-for meeting at Petoskey, or elsewhere in this state, the June Tournament will be in bad shape. Live birds are selling here at 75 cents to 85 cents at the net, or $1.25 to $1.50 on car, cased and fit for shipment."

Ann. Field 18 (Nov. 4, 1882) 318. Chicago, Ill. Messrs. Brand & Ellsworth, 163 South Water street, offer 1000 wild pigeons for sale, undoubtedly the last lot of the year."

Editor, "Wild Pigeons." Chicago Field 18 (April 17, 1883) 153. Chicago. "At present the number of birds in market, dead and alive, is small, but daily the receipts will increase. As yet they are all old birds, but in remarkably fine condition. Last week live birds were quoted at $1.75 a dozen and dead birds at $1.50 a dozen; this week the price is $1.50 and $1.25 respectively, a dozen."


Ann. Spirit & Times 4 (July 17, 1858) 318. Sold in Hartford, Conn. at $1.50 per dozen.


Whitson, T. M. "Pigeons of Ohio" (1882) 440-2. In the spring of 1869 so many pigeons were killed at Circleville, Ohio, that they sold in Columbus for $5 to 6 cts. a dozen."
Prices


When in danger I sparing sold in Cincinnati as low as 25 cts.

A dozen like the usual price was 50 cts to 1.00.


I find from the New York Mercury (no date given):

"One day last week, upwards of seventy-five thousand

pigeons were brought to the market, inasmuch that fifty

were sold for one shilling." [1/2 4th].

Gudd, Sylvester

Albany, N.Y. History J. Hadley ... [Mass.] (1863) 359-60.

"In August, 1736, pigeons fell in Boston to two pence

per dozen (not a penny, lawful) and many could not

be sold at that. In Northampton, from 1725 to 1786,

pigeons when sold brought usually 3 pence to 6 pence

per dozen. In 1790, they were 2 pence, and a few

years after 1800, 13.6d. Since 1830, they have been

sold from 75 cents to 1.00 per dozen."


Account book of William Mills: "There are charged

for pigeons, which were worth in 1755 & 1756 shillings

for a dozen and a half [? A. W. S]. Presumably these were

wild pigeons captured in nets in July, August and

September, the sales being in these months."

P. 51: "August 14, 1754 wheat $2.90 per bushel - in 2.12-6.

Judd, G. History J. Hadley ... Mass. (1905) 351-2.

Information same as given by Ballinood.
Rewards

Mitchell, I. N., Mrs. & Mrs. Pascagoula pigeons. Miss. Arbor clubs.

Bird day annual. (1911) p. 107. A detailed list of all the

rewards offered for discovery of a nest.

Beebe, C. H. Williams. A last attempt to locate and save

from extinction the p. pigeon. Auk 29 (1910) 112. Col. Anthony

R. Kuhle has offered a reward of $500 for information leading

to identification by competent authority of a nesting pair.

His former offer of $100 for a freshly killed wild pigeon is

withdrawn due to danger of complete extinction.

Editor, [Reward for discovery of p. pigeon] Auk 27 (1910) 243.

Abstract of progress report by Dr. C. F. Hodge in Forest

and Stream (Feb. 12, 1910) 253-4.

Hodge, C. F. (Clark University). Passenger pigeon investigation.

F. & S. 74 (Jan. 21, 1910) 812; "To save passenger pigeon."

F. & S. 74 (Jan. 27, 1910) 172, etc.


During 1909 & 1910 the following "possibly true" reports:

Ontario 10; Pennsylvania 9; Massachusetts 8; New York 4;

Michigan 3; Oregon 2; Illinois, Nebraska, Wisconsin,


Not all feathers, however, have been sent in.

Charles K. and Chester A. Reed of Waukegan have spent

400 on a colored plate and leaflet that has been widely

circulated.

Hodge, C. F. A last word on the p. pigeon. Auk 29 (1912)

169-175. Lists some of the letters received during 1911

and all the rewards (p. 175).
Rewards

Hedge, C. F. Dark call for the passenger pigeon.  
F.45.77 (Oct. 7, 1911) 557.
Schoof, Morris.
p. 104. Rabbit in Bloody Run swamp, 2 1/2 miles long by 1/2 mile wide.
...and was a thickly wooded growth of willows, young elms, water
rushes and alders. In the middle were several islands covered
with big timber... 
...The pigeons sat toward the west about
an hour before sundown, often lighting on the intermediate
timber for a while, and passed on in a broad stream as far
as the eye could reach. After arriving at the swamp, they circled
round and round till dark, when they settled down, covering
every limb and tree... We all went in together, but not more
than a few reds, when the men began to shoot. The birds would
rise in throngs with thundering noise, but would soon come
back, for there were limits apparently, all along the margins of
the swamp, and firing was like that of a closely engaged
skirmish line, when the pigeons returned they would light
all over and around us, and no aim was necessary, or possible.
p. 105. Captain James Stone... who settled here in 1815...
...told me that when he was a boy they killed all they wanted by
wandering back and forth a long, slender pole, placed into the
ground near the edge of the swamp, as the birds came in
to the roost. At that time they flew directly into the swamp,
and did not circle over it as in my day, out of range
of shot-guns.

The pigeons left the swamp about daylight in vast columns
several miles in length...
Amos, a pigeon rooster. Road and rail 7 (Oct. 9, 1875) 27.

Location not given. Was in Dec. Last and 3 miles long by
1 broad. The pigeons were roosting in the pines, at least
100 feet above our heads; the pines were about two feet
thick and 150 feet high, and the pigeons were piled upon
Roosting each other in the ceps among the straw and limbs, as long as one could find a foothold or support.


p. 96. Form great heaps of dung beneath their roosts, from which with great management, and very little expense, great quantities of the heat Saltpeter may be extracted."

Beisberger, David. History of Western Indians. Ohio Arch. of Hist., Pub. 19 (1910) 66. "Three years ago [1777] they appeared in such numbers that the ground, under their roosting-place was covered with their dung above a foot high, during one night.


W. C. B. Wild pigeons. F. S. 14 (Mar. 18, 1880) 132. Stated that the above birds feed in the eastern part of Indiana and in Ohio. [From Scottsburg this Delaware to Ohio line is 75 miles].

W. C. B. Birds: Report on Agr. and Hunt. Missouri 1854 324-5. Stated that the trees in a roost are killed by the heating effects of the large accumulations of the ordure about the roosts."
Food

The food of the pigeons consists mainly of various seeds, such as corn, wheat, rye, oats, barley, and the seeds of various wild grasses and weeds. During the nesting season, and probably to a considerable extent at other times, the pigeons fed largely upon animal substances, and particularly, if we can credit numerous observers, upon angler worms and various grubs and soft-bodied insects which are to be found in moist places, a few writers state that the pigeons were fond of roots or tubers of various kinds, and that it scratched and dug for these with great energy, frequenting for this purpose the refuse grounds about the edges of swamps and marshes. It seems likely, however, that a large part of the food obtained under such circumstances was the animal food already alluded to.

One Pennsylvanian writer, with whom the writer talked, stated that after the young were hatched the old birds refused to eat grain and he secured several thousand pigeons by baiting them with angler worms which he dug for the purpose in large quantities.
Food

Brewster, W. Birds of Cambridge region (1866) p. 177. "On July 6, 1870, I shot a female Passenger Pigeon which was eating red currants in our garden."


August 20, 1874. "There were not less than twenty-five Pigeons feeding on ripe blackberries and raspberries in the pasture."

Detroit (Mich.) Free Press, March 13, 1850. "Wild pigeons are quite numerous in our woods back of this city. A friend of mine brought down a brace of them with rice in their crops! The nearest point at which they could have obtained this food is about 700 miles which distance they have probably flown in less than a day, allowing 24 hours for digestion."


"Generally a large crop of acorns as there were different varieties of oaks. "... There were the white oak, post oak, black jack, and burr oak."

"All these varieties I have usually had from light to heavy crops of acorns..."

* Q. stellata *Q. marilandica *Q. macrocarpa.*

** Editor. Interesting to keep observers. Chicago Field. 9 (1878) 186.**

The birds received in Chicago from Petoskey, Mich. nesting. They are in remarkably fine condition, and to show how early the season is, accipiters in a sporting condition were taken from the oaks of the Petoskey birds two weeks ago.

Marsh, W. B. P. pigeons (1907) 111. From E. Pennsylvania, at a nesting near Sheffield, Warren Co. Pa in 1863, the pigeons fed on hemlock mast." p. 115. "They are a greedy bird and will eat anything from a hemlock seed to an acorn. I have known them to nest on hemlock mast alone in Pennsylvania, and in Michigan on the pine mast after the bunch mast was gone.**
Food

Eckh, Sullivan, 'What Became the Wild Pigeon. P. 75. 60 (1903) 206.

Young pigeons hatch in 12-14 days. As soon as hatched the male and female birds commence feeding on what is known as marsh feed, that is on low, springy ground. And from this feed is supplied to both the male and female kind what is known as pigeon's milk... Another singular thing about the wild pigeon is that as the snow melts and the ground is left bare where the feeding is, the old birds never eat the seeds in the melting, but leave them for the benefit of the young ones, and so when the come off the nest he always finds an abundance of food at his very door, as it were.

dz. Crevecœur, Hector St. John, Letters of an American Farmer (1782) p. 37. Carlisle, Pa. "I fancy they breed towards the plains of Ohio, and those about Lake Michigan, which abound in wild oats; though I have never killed any that had this grain in their crops. In one of them, last year, I found some undigested rice. Now the nearest rice fields from where I live, must be at least 500 miles, and either their digestion must be suspended while they are flying, or else they must fly with the celerity of the wind."

Byrd, W. History of the dividing line... (1929) 216.

"In these long flights they are very lean, and their flesh is firm from being white or tender, the good enough upon a March, when hunger is the主宰, and makes it go down better than Truffles and Morils would do."
Food.

Martin, C. T. What became of all the pigeons? Audubon 64 (1914) 481, states that each crop containing 1000 pigeons was fed 2 bushels of corn in the morning. Two feedings would be 1 bushel per day, this equals 0.256 gill per bird.


All most such as beech nuts and acorns, were picked up... and were swallowed whole. I have often been surprised at the large acorns these birds were able to swallow. The bill and throat were very elastic and could be widely stretched. I have shot birds that had the crops so distended with the nuts as to be nearly as large as an orange, and I have taken the nuts out, washed and eaten them.” p. 54. No shot half grown pigeons in Sept. that had been feeding on poke berries (Phyllostachys canadensis) so that all the fluids of the body were stained with the bright-colored juice of these berries.

Sterling, Dr. E. Food of the wild pigeons. F. & S. 10 (March 14, 1878) 93. Cleveland, Ohio, Feb. 6. “Today, on the market, a butcher had for sale 1200 pigeons (Columba migratoria) just received from the Chicago market. They are what are called 'trapped pigeons,' and are in excellent condition for the table. All trapped pigeons that I have ever seen, until now, have had their crops filled with some sort of cultivated grain. But these birds, without a single exception, had their crops filled with acorns, specimens of which I send you... my impression is it is the pin oak of the South west, sometimes called ‘Black Jack Oak.’” (Editor thinks they are black jack oak.) [May have been black oak trees.]

Sentry, T. B. Life histories... 2 (1877) 298. "Its food consists of the fruits of Quercus alba, Q. rubra, Q. palustris, Retula excelsa,
Food

B. nigra, Pogus ferrugineus, Ambrosia artimisiifolia, Ambrosia hybridus, and the berries of Pyrus americana, Amelanchier canadensis, Mitchellia rehderi, Juniperus virginiana, and Lonicera periclymenum, besides the catkins of Alnus serrulata and Betula excelsa. Among insects, we have detailed remains of Callinymus cinctus, Harpalus compress, H. pennsylvanicus, Pedipoda nebulosa, O. sulfuracea, and others.


p. 347. May 21, 1711. "Then we went and got some cherries but we found to our great surprise that the wild pigeons had eaten all the black hearts."

Hearne, Samuel. A journey ... to the Northern Ocean ... (1745).

417. "They usually feed on poplar buds, and are good eating, though seldom fat." This may be an inference since he mentions that in the interior they fly in large flocks and perch on the poplar trees.

Hendelth, S. B. Notes on certain parts of the state of Ohio. Am. J. Sci. 10 (1826) 330. Marietta. In Sept. feast on "berries of phytolacca decandra, or poke, I wish they were as good that the plant has from this circumstance been called pigeon berry" and is generally known by that name.

Hutchins, Thomas. MSS; observations on Hudson's Bay, 1783. Collected by Thompson, Birds of Manitoba. p. 522. "In summer their food is berries, and when these are covered with snow they eat the juniper buds."
Food.

Eaton, G.H. Birds of New York. Vol. 1 (1910) 383. Re Bello! Run nesting in 1868. "Just before laying, the birds fed largely along the banks of streams and on the river flats, searching eagerly for earthworms and other 'green food.'"

Hend. N.Y. Narrative of the Canadian Red River ... expedition. Vol. 1 (1866) pp. 101 and 293. Mention of abundance of pigeons and gray hoppers in the same breath, but does not state that these birds were eating them.

p. 118. Found pigeons on the Pembina River, a tributary of the Winnipeg River, at "an immense marshy area covered with wild rice."

Baard, Faltor. Relation of 1616. Jesuit Relations 3 (1897) 81. Great many pigeons came to Acadia to eat raspberries in the month of July.

Kalmar, Peter. Travels into N. Am. 2 (1772) 140. Lake Champlain. June 29, 1749: "The Frenchmen shot a great number of them ... in which we found great quantity of the seeds of the elm, ... in which we found great quantity of the seeds of the elm, which evidently demonstrated the care of Providence in supplying them with food; for in May the seeds of the red maple, which abound in these woods, are ripe, and drop from the trees, and are eaten by the pigeons during that time; afterwards, the seeds of the elm ripen, which then become their food, till other seeds ripen for them."

Knepper, Henry. Statements about the wild pigeons. F. 45. 12 (1879) 146. "The quantity of 'meat' a pigeon will carry back ... is enormous. Mr. Knepper counted the contents of one pigeon's crop taken in flight, and found 28 beech nuts, 11 grains of Western Indian corn, 100 maple leaves (samaras?) and a quantity of other material."

Knepper, Henry C. Pigeon Cave and vicinity. (1873) 165. Pigeons alighted and fed in a wild cherry tree beneath which General Butler was giving a political speech to 2000 people. (Also under habits)
Food

Linsenmeyer, Rev. E. (June 27, 1874) 197. Their principal food consists of the acorns of various oaks, (Q. septemlobia, B. Carteri, Q. phellos, Q. aequale, Q. venen, the nuts of all the Fagaceae family, including chestnut, chinquapin, and the oaks), cane seeds and the nut-like seeds of pine, other trees and vines, [C. Armudinaria].

Irish, George Henry, History of the Minions of the United Brethren ... (1794) [Orig. Ed. 1792], Part I, p. 116. "Virginia Perch (Phytolacca decandra) ... bearing a red berry, called by some pigem-berry, the pigeons being extremely fond of them."

Mostagge, John. Three years in Canada... Vol. I (1829) 234. "They seem to live in the wilderness, on the buds of various hard-wood trees, as the contents of their crops affirms."

Smith, Mrs. Anne, Memoirs of an Ann. Lady. (1846) p. 42. Along the south Atlantic coast the pigeons eat the berries of the myrtle from which wax is extracted for candles. I was myrtle, (Myrica Cerifera L.), p. 43. Around the great lakes of the interior they eat the seeds of a plant which from its description must be wild rice. Probably all hearsay.


Food


Pigeons must split up to find sufficient wood for nesting. If there is not sufficient food or nesting is not attempted, I have known them to feed and carry to their young, one hundred and fifty miles from the nest. I have seen no actual count in the crop of birds shot or caught, or the return to the nest. One hundred and four kernels of corn, fourteen beech nuts, and twenty-two maple seeds, making in all, considerable over a gill. [4 gills to pint.] This was when the young birds were nearly ready to leave the nest.

"Wild pigeons seldom make mistakes in selecting a location to nest. They must and do know about how many, or how large a nest, can be sustained in the section of the country in which they locate. ... In one instance in Wisconsin they fed on spring-coming wheat, oats, and other spring grain that farmers sowed. They are very destructive. I assure you, farmers leaving to harvest two or three times. They seem to understand that this would not last long enough to get off a nesting. Rather than to take any chance of their young suffering they drop their eggs promiscuously in the fields in which they feed and work in which they rested. This does not occur often. Last season was what is called the off year for birds. There were but very few young birds raised."

Morse, Jedidiah. A report to the Sec. of War ... (1822).

p.15. "Michigan and North-West Territories. This rice invites at the proper season, immense flocks of ducks, geese, pigeons, and other wild fowl.

p.52. Communication from traders at Green Bay. "This [wild rice], furnishes a very palatable and nutritious food for the Indians, and also, for the ducks, pigeons, and other wild fowl, innumerable that frequent this country at particular seasons of the year."
Food.

Lawson, John. History of Carolina (1660) p. 232, ... these pigeons come down in great flocks to acquire, which in those parts [100 to 150 miles west of the coast] are plentifully found. They are the same we call turkey acorns, because the wild turkeys feed very much therein.

Scherer, u. E. Carolina's Pigeons (1769) p. 33. The pigeons had a tendency to move down the valleys, instead of ranging evenly in every direction over the hills. However, they did not rely in the valleys, but also on the hills, wherever they could find beech nuts or hemlock seeds.

p. 36. The beeches of the pigeons would often in late spring be full of sprouted [beech] nuts. Hemlock seeds were the second largest item of food during the nesting season. After that came weed seeds from the valley bottoms.

Acorns ripened too late to be of much value to them in fall.

"They ate while-ripe seeds, but there were not enough of these trees to make their seeds an important item of food. Some years beech nuts were wanted before becoming filled and would hang on trees all winter. In spring pigeons would pick them hand to hand."
Sterling, E. Passenger pigeons and rice. RED & BLUE 7
(Jan. 29, 1876) 277. "Pigeons have been taken in the
northern and western states "their crops filled with the
genuine cultivated rice." At a route 10 miles north of
Cleveland in Sept. 1857 the pigeons arrived before
canoe and increased in numbers until after dark. The
crops in the majority of these birds, on their arrival
at night, were filled full or partially filled, with rice.
and a good sprinkling of rice killed. The grains were in
every state of maceration; few were judge to those just
swollen by the heat and others in the crisp. I did not
know the locality from which the feast was procured.

Strickland. Twenty seven years in Canada West. 1/ (1853) 299. "In July, the pigeons fed a great deal on wild berries,
such as raspberries, huckle berries, and a variety of other
kinds. Many people would naturally think that such vast
flocks of birds would alight on the standing grain and destroy
the crop; such, however, is not the case. Sometimes, during
the seed time in the spring, they are a little troublesome;
but I have never known them alight on the ripening grain."

Sterling, E. C. D. 1. 277. "In the fall of 1853 there was an ex-
tensive forest in eastern Ohio about 10 miles from Cleveland.
That season no shock of any kind in Ohio and Pennsylvania
but the red spruce forests in Michigan east of Saginaw Bay were
loaded with nuts." Was informed by a trapper who hunted
and trapped in the Cass River that at midday the woods
of Muskegon Co. were alive with birds, who imme-
diately after feeding left for the southeast. Thinks the
journey from the Ohio coast to Michigan and return
Food

could easily be performed in a day, allowing ten hours for flight and feeding times; but how make the journey to the rice-fields and Smith and return in every twelve hours! No wonder he admitted, that the birds that returned in evening, leaving in the morning were the return flight from Michigan to Eastern Ohio, a distance of over 200 miles must have occupied at least four hours of vigorous exercise; notwithstanding this length of time the acorns and beechnuts brought by the birds were not swollen or their covering changed in the least.

Saying it is well known that exercise after eating will retard or stop digestion completely. I have often experimented with the wild pigeons while in confinement, and have found that it requires about seven hours for corn to pass the crop; wheat, oats and rice pass in four to five hours. This is when the crop is full; the bird by choice, when possible, remains on its perch until the process is finished. Now I believe that in case these birds experimented with had been in rapid flight during this time their food would have undergone little change. The force required to accomplish digestion would have been utilized instead for the purpose of flight; if this explanation be satisfactory, we can account for rice remaining but little unchanged in the crops of the pigeons after a rapid flight of over 200 miles from the nearest rice-fields and the Smith.
Foods

Thompson, S. Reminiscences of a Canadian pioneer ... (1884) 75-6. Township 2, Sommendale, Disrict Co., Antonio. (c. 1832). The soil was so full of cherry pits that a pan of it when sifted gave a small tea-cup full of seeds. The cause was a pigeon-roost, about two miles distant. "To these pigeons we were, doubtless, indebted for our crop of young cherry-trees." "... devoured all our young pear."

Thompson, E., et al. Birds of Manitoba. Proc., U.S. Nat. Mus. 13 (1891) 523. C. W. Nash, MS. "On the 27th of June, 1886, 9 shot fourteen of these birds, all males, each one of them having its crop examined, full of green caterpillars, mostly of the species G. geometra."

Powers, Grant. History of Cass County [N. T.]. (1841) 110-1. There was a plague of army worms, the summer of 1770. "An immense number of pigeons which fed on them when the disappearance of the Northern Army. No statement as to the pigeons eating the army worm (Leucania unijuncta)."

Munro, Peter. A description ... Aug. 28 (1911) 61.

Foods in the order in which they mature:

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p. 61: "Seeds of the Red-flowered Maple; these mature in Pennsylvania at the end of May, but somewhat later farther North."

American elm, Ulmus americana. Mature in Pa. the first half of June. The pigeons shat between Albany and Canada had their crops filled with elm-seeds.

Food.

p. 62. They consume all kinds of grains, but will not touch corn.

ate rye with avidity “like cattle,” as if in the absence of something else more palatable. He was assured by some people that pigeons “combed up” the rye on which they had feasted on coming to a wheat field and thus gorged on wheat. Wheat is one of their most coveted foods.

p. 63. Very fond of buckwheat. Also consume with avidity the berries of Tupelo or some genus (Nyssa).

p. 63. Acorns. Most fruits in North America consist of oak, but which other genus there are several species of these the greatest 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’s breadth high and sometimes more.

p. 63. Pecan nuts. Very fond of them. Where with acorns form their principal food in fall and winter.

Thompson, W. W. The passenger pigeon. 1907, 12, One morning including the gardens and yards, and crows were covered with pigeons. He [Mr. Pratt] explained that the birds were nesting somewhere west of here and were “warned.” The idea conveyed was that at a certain age the young birds left home for a few days fed on worms, or grass seeds, or both. During a subsequent nesting the birds were reported “warned” on the flats on Pine Creek, near Manchester.

Mearns, W. B., The passenger pigeon. (1907) p. 132.

James B. Purdy: “One peculiar habit of the Passenger Pigeon was that during their migration, although they might alight and their crops were filled with inferior food, they would vomit it up in order to fill themselves with something better should they find it.”
Whitman, Pigeons, 3 (1914) 144-5, "I have noticed that the ectopids' parents, especially the female, search the ground over and over, looking under the plants and along the edge of the boards, as if hunting for worms or insects. The object may be to help rear both male and female, as the ground searching and working in the space with the beak, as if to find worms. On a later occasion I placed a handful of earthworms in the foot-dish cage containing an [145] Ectopids young only 32 days old. This bird was hatched under ring doves, broke when reared under them and had never seen a worm. After a glance or two the young passenger descended from his perch, took up a worm, tied it at the end of its neck, and dropped it. After repeating the act three times he at last swallowed the worm and there ate several others, generally eating them as little first. [Mention several species that eat worms] I am inclined to think that pigeons very generally eat earthworms."

p. 119. A hybrid Ectopids ate worms. Here, then, is a case where the instinct, received from the parents, acts independently of imitation. The bird's instinct led it to attack the worm by the mouth, stimulated its bird to swallow it quickly from its beak, just as the adult Ectopids does. The bird had never before tasted of worms, having been fed under ring doves and having received only seed and bread."

p. 145. "There is much liked by wood pigeons (C. palumbus) as well as by other pigeons. They also like the pliantain leaves growing in the yards. Lettuce is eaten quite freely by pigeons generally."

Wilson & Chaparte, Ann. Smith, 2 (1871) 257. Mentions corn and beechnuts. But they are not confined to these alone; buckwheat, hempseed, Indian corn, hollyberries, blackberries, huckleberries, and many others furnished..."
From them in all abundance at almost all seasons. The
arrows of the live oak are also eagerly sought after
by these birds, and rice has been frequently found
in individuals, killed many hundred miles to the
northward of the nearest rice plantation. . . . I have.
Taken from the crop of a single Wild Pigeon, a good
handful. Of the kernels, I breech nuts, intermixed
with acorns and chestnuts. To form a single estimate
of the daily consumption
\[ 2,230,272,000 \text{ pigeons eat at rate of half a pint a day} \]
\[ 17,424,000 \text{ bushels must} \]

Two Orosse (Wis.) Evening Democrat June 1, 1871. "Teaching

Pigeons by Telegraph." - "One man shipped from
Milwaukee to Buffalo one thousand and two corsets
contains altogether ten thousand and two hundred
pigeons. . . . During their three day's trip on the
propeller from Milwaukee, the birds consumed thirty-
four bushels of corn." \[ 8,704 \text{ bushels} = \frac{34}{\text{bushels}} = 8,704 \text{ gills} \]
\[ \frac{8,704}{(10,200 \times 3 \text{ days})} = \text{only} .28 \text{ gills per day} \]

Milwaukee (d) Democrat March 21, 1855. 'Wausau

Herald (not in library). "We shot a pigeon near the
village last week, from the crop of which was extracted
80 acorns."

Manistowne Transcript June 19, 1860. "Several oat fields just
seeded in this vicinity are said to be crossed with them."
Food.


"The crops of the pigeons were filled with acorns and in preparing the pigeons for shipment these accumulated in such quantities that it was necessary to get logs to eat them up. In turn the logs became a pest, running into the nets, making necessary expensive repairs."

Hallister, N. D., Recent record of the passenger pigeons in southern Wisconsin. Arch 13 (1896) 341. Bird shot near Delavan Lake Sept. 8, 1896. "The crop was filled with acorns and grasshoppers."

See under Hutton (Wis. file) article re Daniel C. Van Brunt, Hutton making the first under-ground reed in 1860 to circumvent raiding by pigeons.

King, Franklin H., Economic relations of Wisconsin birds. Ornithology of Wisconsin. Survey B 1873-1879. Vol. 1 (1883) p. 589. Food. Acorns and other nuts, grain, buckwheat and various small seeds are its usual food. From the stomach of one specimen, however, were taken two large caterpillars - one of which was an Enemia albifrons, one learned man, nine black crickets and four grasshoppers.


"Their principal food was acorns, while at Black Rock they could swallow them and contain as many in their crops at once was a mystery. I have seen as many as a tea cup full taken out of their crops at once."
Anon. [Pigeons]. Wis. Farmers 3 (1851) 151. Suggests that Wisconsin farmers plant wild rice now feeding myriads of wild geese, ducks, pigeons, and other birds. Audubon, Vol. 1 (1831) 319-20. Pigeons killed near New York with their crops full of rice which they must have collected in the fields of Georgia and Carolina.

p. 322. As every pigeon daily consumes fully half a pint of food, the quantity necessary for supplying this vast multitude must be eight millions seven hundred and twelve thousand bushels per day.

p. 322. "Whilst feeding, their rapidity is at times so great that in attempting to swallow a large corn or nut, they are seen gasping for a long while, as if in agony of suffocation."

Angeley, Samuel. Notes on the nature of the wild birds of Nebraska (1878) p. 46. Examined 6 birds supposedly shot near Lincoln, Lancaster Co., Sept. 1879. "Though supposed to live wholly on gramineous food occasionally eat insects." Five of the birds' stomachs contained from 7 to 15 corns, the sixth 15 wild rice grains.

Witherby, N.F. et al. The handbook of British birds. Vol. 4 (1948) 132. Wood pigeon. C. palumbus. Crop has contained 61 ears; 28 hazel-nuts; 156 beech-nuts. (wt. 9 pigeons not stated. Long. 4' 17"; band-tailed pigeon is 16').

Food

Bond, Frank. The later flights of the p. Am. (38(1921)525-6
in spring the pigrina eat undigested corn
lost during the fattening of cattle.

years there are many pigrina... feed on berries,
very plentiful but some years, such as: strawberries,
raspberries, blueberries, gooseberries, redberries,
cranberries, small cherries, and abundance of wild
currants of different colours."


Mourning doves went to pine woods for weeks at a time
to feed upon the seeds which they secure by walking
cut on the branches and extracting them from the cones.
Flesh acquires a string, poise flavor.

July 12, 1605. "Upon these islands grew so many red
currants that we can hardly see anything else; and
there are countless numbers of pigrina, whereby we took a
goodly quantity."

11. Probably a variety of the European
red currant (Ribes frutices, Pall.).

pigrina that had been feeding on cranberries (Empetrum
nigricorn).

Cox, William T. Do droughts explain the plains? Am. Forests
42 (1936) p. 556. "Here is a hundred year record to show
that tree growth has been gradually extending westward for
a long period. The heavy needled trees - oak, ash, maple...
unquestionably made slow progress upstream and against
the prevailing winds of the plains. But progress they made
in assisted in their advance by favorable cycles, rainfall
and by the vast flocks of passenger pigeons of bygone days
no less than by other birds that feed on acorns and nuts.

Infra, unless caught by predators or killed by
branches or aviators.

Ferris, John C. The flora and fauna of the Great West.
N.Y. (1856) p.176. "The wild pigeons [in Michigan], in
countless numbers, will hover, and flitter, and flap
among the bar-oaks.

Ferris, John C. An account of the birds sent from
Hudson's Bay... Phil. Trans. 62 (1772) 382, 398.
"Their common food are cherries and juniper buds in
winter."

Goodrich, P.G. History of Wayne County, Pa. (1880)
p.78. "Pigeons have been caught in Wayne county
with undigested rice in their crops."

Hardman, Col. James. Journal, William and Mary
College Quart. 11 (1902-3) p.200, June 16, 1760,
"Plucking trees the second time, the pigeons had
pulled them up."

Humphrey, Charles W. Notes on the wild pigeons, Western
Colophon 1, no 4 (1858) 14. "The main colony visits
Mich. every two years due to abundance if shocks
are present and security the next."
Food.


Hardy, Forest life in Acadie. London (1869) 318, 328.

Pigcens feeding on pigem-berries [beachberry] Cornus canadensis.

Peabody, W. D. O. A report on the birds of Mass. ... For Boston Soc. Nat. Hist. 3 (1841) 194. "... One office of the pigmen seems to be to protect the oak forests. It is stated, on excellent authority, that for some years after they have occupied a particular spot as their feeding place, the oaks for many miles around are remarkably free from the green caterpillars, by which they are apt to be infested."

Why? eating.


Passenger p. and mourning dove swallow an acorn entire, only the cup being removed.

Eagles, H. M. Early days in Upper Canada. (1926) 134-5.

Blyth, June 16, 28, 1835. "... immense flocks ... devoured great quantities of my pease and oats."

Levinge, R. G. A. Echoes from the backwoods. Vol. 1 (1846) p. 127-8. New Brunswick, arriving in June and July. "... Their favorite resorts are the neglected clearances overgrown with wild raspberries and strawberries, which are their favorite food; also the great mosses and barrens covered with cranberries."
Food

and whortleberries, where they are to be found in
great quantities, and from amongst which they
rise singly or in pairs.

Williams, Roger. "A Key into the Language of
America (1643)." Rhode Island Hist. Soc., Colls.
1 (1827) 87. "In that place there Fowle breed
abundantly and by reason of their delicate Food
especially in strawberry time when they pick
up whole large fields & the old grounds of the
Natives, they are a delicate fowle and because
of their abundance, and the facility of killing them,
they are and may be plentifully fed on."

Maynard, S. J. The Birds of eastern N. America (1881) 336
Observations 8 August Koch, Williamsport, Pa., Eat
whortleberries, raspberries, and cherries in August,
and green acorns and gum berries in September.

Parke, Frederick. Journal (1807). Hardener's Monthly
10 (1869) 14-6. "This morning I took an excursion accompanied
by Mr. Willbourne who wanted to show me the Creek &
Pigeon pear as he calls it... Martin's Creek, Pa.

"The pigeon berries or Pigeon pear we could not find
until we returned to the house, where a place was where
they commonly grow; in bowing up some ground they showed
near the roots by which I found them to be probably
nothing else than the tuberles of a species of Glycine,
resembling narrow fat peas very much; the pigeons
scrach them up at certain times of the year and feed
upon them very greedily." Mitchell, p. 98 thinks this
was Glycine monosperma. Gray p. 530 gives
Glycine comosa, as a synonym.
Four years ago [1857] last spring I noticed large flocks
in vast numbers, in the fields, feeding upon the dead
grasshoppers, the remains of the countless hordes which
well might devour all "every green thing", during the
preceding summer and fall.

Wheeler (1882, p. 441) as above says: "A statement
which will surprise ornithologists who have been accustomed
to consider birds of this family as exclusively vegetarian."

Reid, Peter. "Pigeons feeding in crops. Red & Blue 7 (Jan. 8,
1876) 227. The Audubon's statement that pigeons have
been killed in N.Y. with rice in their crops. This peculiar
substance [pigeon milk] sometimes granulates in the crop
when it greatly resembles bull's rice. This substance is
found in birds having recently hatched young and it is a
remarkable provision for nature."

Révoil, P.H. "The Hunter and Tracker..." London (1874) p. 129

Autumn of 1847, near River, near Hartford, N.Y. Estimated
the no. of pigeons at the roost at 1,120, 140, etc. and as such
member of a pigeon daily consumes a quarter of a bushel
of seeds or foods, the daily nourishment of a single band
would not require less than one hundred millions, one hundred
and eighty thousand bushels of all kinds of provisions."

(This is not in the translation in Bird-Store)

various sorts; elm and maple seeds, berries (especially blueberries),
spains, weed-seeds; caterpillars, grasshoppers, and other insects,
canker worms, moths, etc. They gain in considerable quantities
Food

Both in the spring at seeding and again in late summer at harvest.

In the early spring Wild Pigeons subsisted in Minnesota chiefly upon the previous year's coarse greenstuff covered the ground, and they knew well how to choose the sound ones from the many that were rotten. After rapidly picking up all they could hold they flew up into the trees and sat quietly drying while their powerful, muscular gizzards ground to a pulp the seemingly difficult article of food. A well-loaded Pigeon, when it left the ground, had the crop and neck filled out almost to the size of the body. While one of these birds was shot it struck the ground with a rattle like a bag of marbles. The writer once picked up by the feet one of these gourmands and shook it gently one by one, scattering acorns fell out!


Wheaton, J. M. The food of birds as related to agriculture. Ohio Agr. Rect. (1874) 521. The food of this family [Columbidae] consists of acorns, wheat, meal, corn, buckwheat, timothy and various grains, with dogwood, poke, partridge and whortleberries. It will be noticed that insects do not enter into their diet, and this is true of them and their young at all times.

Slagals, C. E. Wild Pigeon in Mass. F., 48, 33 (Oct. 17, 1889) 243. On Sept. 23, they were eating dried blueberries and huckleberries still hanging to the bushes.
Wilbur, et al., Personal recollections of the p. pigeon. Arch. 51 (1934) 168. "At first the birds fed on beech nuts lying thickly on the ground; wintergreen berries (Pyrola minor procumbens) and partridge berries (Mitchella repens), evergreen plants which retain their food all winter; and the seeds of some currants. Later they added June berries (Amelanchier canadensis), and the red elderberry (Sambucus pubens), actually gorging themselves upon the latter ... We also found the wild red cherries (Prunus pennsylvanica), choke cherries (P. virginiana), occasionally, a few acorns, and marcescent small seeds, probably weed seeds, in addition to wheat and oats garnered from the storm fields. Invariably after a rain storm we found angle worms with other small worms and insects. We never found any green herbage or trace of garden crops and I never heard anyone say that the birds destroyed cultivated crops of any kind although they sometimes came into our yard in late summer to eat the ripening berries of the mountain ash, a line of these trees having been planted to shade a footpath."

Springfield (Mass.) Republican; Milwaukee (W) World, Oct. 4, 1854. "Large crops of pigeon. A man in Southwick has 250 doz. that he is fattening for market. They consumed fifteen bushels of corn last week.

\[ 15 \times 256 \text{ gills} = 3840 \text{ gills} \div 7 = 548.5 \text{ gills per day} \]

\[ 548.5 \div 300 \text{ birds} = 0.18 \text{ gill per bird per day} \]
Food

8,400 captive pigeons ate "over eight bushels of grain per day." [This figures 0.24 gallon per bird per day].


p. 52. No date. "I was informed of the abundance of pigeons up the Titla Sarawee river. The creek formed a large pond at this point which was supplied with an abundance of wild rice, which made good feeding grounds for the pigeons."

Tomarack. The wild pigeon. F. 45. 25 (Nov. 26, 1885) 346.

Smith Bryan, Oakland Co., Mich. Abundant up to 1874, since then only a few single birds seen.


"As few pigeons are seen..."


p. 1027. Rails, pigeons, quails... woodpeckers, and many other birds also consume the grain by pecking from the heavy stalks." Native attain an inch or more in diameter.

p. 1056. Grain matures latter part of August or September.

Anon. Passenger pigeons reminiscences. Cardinal 1, no. 3 (Jan. 1924) 7.

John C. Anderson states that 20,000 pigeons would alight on the roost at one time to get the corns that limbs were sometimes broken.

"Wheat seemed to be the favorite food of the wild pigeons, but in its absence they would eat most any kind of grain and would feast abundantly on beech-nuts and acorns, and when pressed by hunger would eat most any kind of weed seeds."

Passenger pigeons, like other pigeons, have the power of digesting inferior food when a better quality is found. The objection weed commonly called Red-root, known better by the old settlers of Michigan by the name of pigem weed, was supposed to have been carried hundreds of miles by the passenger pigeons and then digested when the wheat fields, where it took root and grew, thus giving the name pigem weed. Their object, of course, was to fill their crops with a better quality of food."

Anon. Sketches and eccentricities of Col. David Crockett... London (1836) p. 44. "They frequently fly as much as eighty miles to feed, and return to their roost the same evening. This was proved by shooting them at their roost. One morning when their crops were empty, and then shooting them again in the evening when they returned. Their crops were then found filled with rice, and it was computed that the nearest rice-field could not be within a less distance than eighty miles."

Gemmell, relation 1662-3. (1794) wooded woods and fields of strawberries and raspberries.

Maxim von Wied. J. f. Amer. 6 (1858) 428

"In autumn in Missouri their crops were filled with the seeds of the poplar.


Chaffee, Plainfield, Wis. Nested about 1878 around Avenue Rock, sec. 16 (SE & NE) town of Lee, Adams Co., Orange.

Tamarack swamp now cut out. C. shot many birds returning with crops filled with beechnuts which they must have secured in Michigan. "Actually, there are beeches near apple-trees, and perhaps nearer. It would seem strange, that the pigeons flew about 40 miles for the nuts, perhaps further."

French (1919) p. 95. E. Haskell. "Half an pint of beechnuts has been found in a pigeons crop."

After the beechnuts sprout, pigeons eat young elm buds.

"I've seen Passenger Pigeons feed their young insects before they even hatched them in beechnuts or acorns. ... The Pigeon I've seen looking for food (when we get snow in fall before migration) they need to dig like a Robin, looking for insects under old, autumn leaves. But, I never seen a Pigeon scratch like a chicken. ... The young Pigeons that fell to the ground would be fed on the ground by the old birds or left to starve to death.

Seton, Ernest Thompson. In litt. Dec. 28, 1940. Re flight of tomatoes in 1876. "It was understood that they came each year to feed on the seeds of the slippery elm, which covered the ground in early spring."

Smith, M. W. Taylor, Wis. In litt. Oct. 9, 1938. "The bodies of the first birds that were killed after their arrival were filled with such food as acorns and strange to say snails, shell and all."

Godd, Sylvester D. The food of nothing birds. Yearbook Dept. Agr. for 1900 (1901) 431.

In June, 1878, C. Hart Merriam collected adults & squabs in the Adirondacks and found the crops of both distended with beechnuts.

Whitman 3 (1919) 156. "Indisputable evidence of memory is shown by pigeons..." 67-8. Both old and young can throw up food.
"It is very well known that at Churchill Factory in Hudson's Bay in latitude 58° 47'. 32" N longitude 94° 13'. 98" W; in the spring, wild grey geese are killed with wild rice in their stomachs, in which they must have fed near the Turtle Lake in latitude 47° 39'. 15" N longitude 95° 12'. 48" W, the direct distance between the two places is N 3° E 780 statute miles. Rice grows sparingly as far as 52° N., so minimum distance would be 660 miles to Fort Churchill.

Wild geese before a gale will fly 60 miles an hour, so 13 hours would be required from Turtle Lake to Churchill. Dr. John Hunter found that an active dog did not digest meat like an inactive one.

1° at equator = 69.7 miles
1° pole = 69.4"
May 22, 1849. 5 miles below St. Paul. Around under oak grove covered with acorns & trees alive with pigeons.

Eaton, Birds J. N.Y. 1381. C. Hart Merriam, writing in 1881. "Early in June, 1878... The crop of the young birds [almost ready to fly] was full of beech nuts, some of which had the shells on."

Sudd, S.D. The food of nestling birds. Yearbook Dept. Agric. for 1900 (1901) 431. "In June, 1878, Dr. C. Hart Merriam collected in the Adirondacks a number of adult passenger pigeons (Ectopistes migratorius) and their squabbs, and found the crops all distended with beech nuts."
Catesby, Vol. 1 (1731), p. 23. "Where they light, they no effectively clear the Woods of Acorns and other Nuts, that the Hogs, that come after them, to the detriment of the Planters, fare very poorly."

Blane, W. N. An excursion through the U.S. and Canada in 1822-23. London (1824), p. 143. "Large piggeries now at Fishtail Point winter 1822-3. These piggeries do a great deal of mischief, for as they clear immense tracts of forest, all the mast, acorns, etc., numbers of hogs, which run at large in the woods, are in consequence starved to death."

P. 183. "In the neighborhood of Fishtail Tavern [on road to St. Louis], as there had been an abundance of mast (by which word is meant Beech nuts, acorns, chestnuts, etc.), the settlers had all congratulated themselves upon its being a plentiful year for their hogs; but one of these amazing flights of piggeries, of which I have already spoken, suddenly came into this part of the woods, and devoured not only the mast that had fallen, but even that which remained half ripe upon the trees. Consequently numbers of the hogs were starved to death." [Fall of 1822].

Lawsen, John. The history of Carolina. Raleigh (1860), 1st ed. London (1914), p. 233. "It is observable that wherever these fowls come in such numbers as I saw them then, they clear all before them, scarce leaving one acorn upon the ground, which would doubtless, be a great prejudice to the planters that should seat there, because their swine would be thereby deprived of their mast."

Byrd, W. Histories of the dividing line ... (1729) 216. "In their travels they make meat Harvest among the Acorns and Berries.
of all sorts that they waste whole forests in a short time, and leave a famine behind them for other creatures.

see Scherer, incomplete gathering of beechnuts.

Helm, Peter, A description ... Augt 28 (1911) 59. '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 centurions, in Pennsylvania and adjacent localities, an abundant crop of acorns and other arboreal seeds, swelling that in several previous years; but during their stay the pigeons had so carefully searched and ramshackled all possible woods and corners that after their departure it was almost impossible to find a single acorn in the woods.'


'The next quantity of meat which these multitudes consume, is an armed force to the bears, pigs, squirrels and other dependants on the fruits of the forest.'
Red, N.S., Trapping wild pigeons, P.S.S. 14 (July 1, 1880) 433.

The nesting at Kane, McKean Co., Pa., in 1880. "I could not learn how, but certain it is that in some way the birds learn the location of the richest harvest and are always in hand at the right time to enjoy it. Last fall a few pigeons were observed in the woods near Kane, and the "old settler," with an air of eminent knowledge . . . said that with the spring would come their flock. The few stray birds remained in the neighborhood all winter, and during March the prophecy was verified by the appearance of countless millions of pigeons."

[Bishop, Louis E.] Pigeons by the million. N.Y. Times May 9, 1886.

". . . every fruitful beechnut year being soon to be followed by the appearance of the birds in greater or less numbers. . . . The condition of the nest crops is learned in the fall by the birds, flocks of scouting pigeons visiting the woods in the night, south, and it is supposed, informing the great body of the birds as to the result of their investigations."


p. 258. "The female Pigeon was some five or six years old and of the Passenger variety;"

p. 269. "The ability to learn and remember the birds have a fairly good memory."
Fossil


Habits


"There were not less than twenty-five pigeons feeding on the blueberries and raspberries in the pasture... Whenever we entered it, they would all rise at once and range, from the low bushes, and alight together in some tree at the edge of the bordering forest, where it was perfectly easy to approach them closely, as they seemed to have no fear of us after pursuing them... They were exceedingly difficult to hit because of the swiftness of their flight, and their habit of twisting and doubling abruptly when making off through the tree-tops..." [p. 308] Even after having been fired at repeatedly the birds continued to return to the place and to settle again and again among the blueberry and raspberry bushes.

p. 309. "They usually chose conspicuous perches on tall trees, or among leafless branches, and sat there erect, with necks elongated, and almost perfectly in line with the body and tail, showing very long and slender, and remaining motionless save for occasional nodding, or oscillating if the head as they gazed fixedly at the advancing sportsman, with what seemed an expression of fixed, timidity and curiosity. In order to make them fly I have seen more than one had to throw stones at them, or to pound the base of the tree-trunk with a stout stick, but this report of variously caused every bird in the flock to instantly take wing and dash off at full speed. In densely leafless tree-tops, where they occasionally sought shelter, they were always difficult, and sometimes impossible to see, however numerous assembled."

... now can I remember that, like the Mourning Dove, they never made a whistling sound with their wings either in rapid flight. In other respects, their flight was similar
Habits

to that of the Dove's but somewhat swifter and at times more erratic and tortuous. ... I have often been unable to satisfy myself respecting the identity of single birds viewed at a distance, or in unfavorable lights. For a Dove seen [p. 810] through mist-laden atmosphere sometimes looked as big as a Pigeon and when its colour and markings could not be discerned it might easily be mistaken for me, there being no very obvious points of difference between the two birds in respect to their general appearance or behaviour.

Green, G.I.A. Wild pigeons. P. 45. 81 (July 19, 1913) 75, "One peculiarity of the wild pigeons which I vividly recollect is its habit of raising its head and nodding. This action of the bird seemed to occur when ... I approached somewhat near, I have assumed that this motion of the head was an indication of the curiosity of the bird, as to what was about to happen."

"Another habit of the wild pigeons was to alight upon the dead top of some old forest tree where it had a wide view of the surrounding country and of the approach of hunters.

Riddin, John G. Recollections of the wild pigeons ... Proc. N.Y. O.C. No. 14 (1910) p. 35. "Wild pigeons always impressed me as having two principal characteristics, timidity and stupidity. Usually they were very timid and the snapping of a twig or the mere glimpse of a person approaching, would start them in flight. Sometimes they were fearless.

p. 36. "A dead tree top or dead limb was always an attractive roosting spot, and I have known birds to sit on the same perch for hours at a time. ... When a Pigeon was roosting she invariably sat flat on the limb, his
Habits

(Redlin) head drawn close to his body. On the approach of danger he generally stood up and stretched out his neck; if his head moved slowly about, you were safe in the belief that he was not alarmed; but if on the contrary a rapid motion was observed it was a case of short, quick, bread, he had decided to fly, and when he did fly he was off like a whirring wind.

Bryant, C.A. The buzzard, pigeon, E.E.S. 80 (April 18, 1913) 494.

"The pigeons at the time of the spring flight were thin in flesh, though strong and vigorous, and much wilder and more difficult to approach than in the summer or fall."

p. 512. "... eagerly eating the buckwheat, fluttering along the swaths, and walking with the jerky, alert step of their gait."

Howitt, Henry. A short history of the passenger pigeons. Can. Field Nat. 46 (1892) p. 28. In June, 1850, found a nest with a downy squab that was raised. It did not associate with domestic pigeons. p. 28. "When a hawk came into view, it flew to one squab, for protection, and when a flock of its kind flew over, its wings and movements indicated recognition and pleasure. It never tried to join one but watched every flock till out of sight."

Treadwell, Henry C. Pigeon care and vicinity. Boston (1873) 165.

The pigeons alighted in a wild cherry tree beneath which General Butler was giving a speech (political) to 2000 people.

Scherer, E. P. in N.W. Penn. Cardinal 5 (1939) 36-7. "The pigeons showed no fear of a person in the city during nest building time, but they soon learned to recognize me as an enemy and became very wary. The pigeons in the deflated ranks during the last part of the nesting were tighter and harder to call down than those at first. Brooding hawks flew away from the nests when
Habits

They saw a man coming into the city. When a great deal of shooting was going on in the city, the old birds still in quickly to feed their young and hurried away again. The squab in the nests showed no fear; they were kind of a dumb bird until old enough to fly. When first on the ground the squabs were too fat to fly and were easily caught, but after two or three days they could get about quite well and would flee from danger.

p. 93. Never observed to fight over mates or nesting sites.

The only fighting that he had seen was mild quarrels over their food. He had never seen them quarreling with other species. They seldom associated with birds of other species.

Pokagon, Chautauqua 22 (1895) 202 3. While feeding, they always have guards on duty to give alarm of danger. It is made by the watch bird as it takes its flight, beating its wings together in quick succession, sounding like the rolling beat of a snare drum. Such as thought each bird repeats the alarm with a thundering sound, as the flock struggles to rise, leading a stranger to think an young cyclone is then being born.

Schoff, M. Eliza and Nenahsville (1905) 108. I had many a close view of them, for I trapped a great many and kept them in pens, sometimes as hundred or more. No bird ever had a colder, more unflinching eye.

p. 109. Southern Illinois Missour " in 1897 or 1898. While seated on a fallen tree, suddenly a flock of perhaps seventy-five or a hundred bit near by, and soon were down picking up the little acorns. I the winter oak that grew in the woods. After they had filled their crops, they flew up, and, bunching their heads on their breasts, dozed apparently, until something startled them, when with their old-time speed, they disappeared among the trees."
Craig: Wallace, Recollections of the passenger pigeons in captivity. Bird Lore 15 (1913) p. 95. The distinctive character of the species appeared ... in every detail of its posture and movements. ... In them [photographs] one can see that, with its long, pointed tail, its graceful, curved neck and head, and its slender, strong body and wings, the Passenger Pigeon was truly elegant. ... The elegance of form and posture was matched by an elegance of motion in every act of the birds while on the perch or in the wing.

"The Passenger was preeminently a bird of flight. Accordingly, its movements on the ground were a little awkward, in contrast to its grace when on the perch or in the air. It indulged often in a grand wing exercise, standing on a high perch and flapping its wings as if flying, now slowly, now powerfully, now leaving the perch to fly up and down the aviary, returning to the perch and again commencing the wing exercise, looking about for some place else to fly to. ... Extreme powers of flight and extreme gregariousness seem to be the two fundamental traits in the peculiar habits of this species."

p. 96. Hard harsh, unmusical notes, developed for life in an extremely populous and hence noisy community.

p. 97. With the loud notes as used in anger, he stood at full height in his majestic way and impressed the enemy by his bold appearance, and sometimes each loud note was accompanied, quick as lightning, by a strike of both wings, which struck the enemy if he was near enough, and powerfully frightened him if he was at a distance. On the other hand, with the soft, clucking notes, which expressed gentler feelings, even to dozing, the talking bird nodded.
Habits.

along the perch to the bird to whom he was talking, and sometimes put his neck over her in a way which showed his tender emotions. The Passenger was very quick and nimble in moving sideways along a perch, and this movement was so characteristic of this courting as to distinguish it from the courting of any other species.

"The female of this, as of all other pigeons, was more quiet than the male in both voice and movement, and distinguishable by a characteristic shyness in her attitude, especially in the pose of her head."


Waynord, E. J. The birds of eastern N. Am. (1881) 536.

Information from August Kreh, Williamsport, Pa. During the latter part of September, early mornings, especially when foggy and damp, they may be observed on high grass-tops which overlook the foot of the mountains. They sit near the top of the tree and generally close together, their bills resting on their breasts, and their feathers puffed out apparently without a motion; at such times these birds may, with caution, be approached very closely but should the Pigeons have the slightest suspicion of our approach, they will give a note of alarm, sounding something like a laugh made with a child's trumpet. This same note is occasionally used when not in danger. When frightened, they will dart with great velocity from the limbs, by far surpassing Wilson's Snipe in the twisting motions..."
Habits

Roberts. Birds of Minnesota (1932) 585. "The Wild Pigeons were a handsome, trim-looking bird. When alighting to rest a flock settled in the top of a dead or partially dead tree, sitting erect on the branches and in crowded mass, their long tails hanging down and their small heads bobbing and turning in all directions. They were wary at such times and not easily approached on foot, but paid little heed to a horse or wagon. . . . When intent on feeding in dense shrubbery I ask myself they filled the trees and covered the ground and were they much less cautious. At such times they were apt to be noisy, uttering their abbreviated coo and various harsh call-notes. Isolated pairs in the nesting season were much given to sitting close together, billing and caressing in the manner of the Mourning Dove."

Trappel, T. Martin. Some differences between wild and cultivated birds. Am. Nat. 5 (1871) 634. Writing from a town of nine to six thousand inhabitants in southern Iowa, stated that, "wild pigeons and doves may be seen gleaming in the busiest streets."


Peckham, George W. Proc. Wis. Nat. Hist. Soc. Oct. 26, 1899. "President Peckham described some recent experiments made by a gentleman of Chicago [Whitman?], upon passenger pigeons, mule, puppies and other animals, which tended to prove that certain facts were not due to any defect in the vision of these creatures, but rather to their inability to recognize familiar objects when the latter were placed under unusual conditions."
Habits.


Kalm (1911) 64. Timidity.


Nuttall (1832) Re pigeons drooping each other while drinking at a pond.

Thereau Journal 4 (1906) 44. May 9, 1952. "Saw pigeons in the woods with their inquisitive beaks and long tails..."

→ 27 (1906) 331. July 21, 1851. "Saw pigeons here near resting in the thickest of the white pines during the heat of the day, migrating no doubt. They are unwilling to move for me."

→ 6 (1906) 18. The turtle doves plagued him, [brooke] for they were restless and frightened the pigeons.

Fisher, W. H. Maryland Birds that Interest the SPORTSMAN. Ornithologist 11 (1894) 139. "Single birds frequently fly with flocks of Doves."

Hugh, E. A genuine wild pigeon. P. F. S. 53 (Sept. 23, 1899) 248. Haab Wis. pigeon shot was associated with doves.
Habits

Whitman, Pigeons 3 (1919) 22. "All pigeons, so far as I know, carry one straw at a time."

I have found that the male passenger pigeon also delivers his straw or twig by mounting on the back of the female and placing it in front of her in the place most convenient for her to receive it.

p. 24. Nest-call. "The call of the male Eclectus is a succession of short notes, and sometimes a louder and more prolonged call, corresponding to the coo-call of doves. The female's call is less loud than that of the male; her call is a very crude one as compared with that of ring-doves, it is a rather hoarse, low sound, impossible to describe. It is a simple squawk, somewhat as if produced by a bird that has lost control of the organs of voice, or that has never learned to use them. The male makes a similar call, but louder and more explosive. The male passenger flew back and forth, calling his mate while on the wing. This behavior was noted at second time.

p. 26. The nest-call of young ring-dove. Another instance of the giving by the nest-call by a very immature bird was as follows: A young passenger pigeon, only 57 days old, was standing on the perch in the new pen in my library. I let a pair of ring-doves free in the room. These very tame doves flew about in delight. When they alighted in front of the pen containing the young passenger, the latter promptly raised this tail and bowed his head, giving the call note of the parents species perfectly. This occurred 5 weeks and 3 days after it had been taken from its parents, and since its parents had been kept in the back yard the young passenger certainly could not have made this note in imitation. When he was about 2 weeks old he must have heard his parents thus call in preparing for a second nest, but this was the last
time. The old birds gave this call, for they mated soon afterward, and made no more calls for mating. The young passenger pigeons repeated this call again on the following day."

p. 28. Influence of Social Environment." "If a bird of one species is hatched and reared by a wholly different species, it is very apt when fully grown to prefer to mate with the species under which it has been reared. For example, a male passenger pigeon that was reared by ring doves and had remained with that species was ever ready, when fully grown, to mate with any ring dove, but could never be induced to mate with one of his own species. I kept him away from ring doves a whole season, in order to see what could be accomplished in the way of getting him united finally with his own species, but he would never make any advances to the females, and whenever a ring dove was seen in hand in the yard he was at once attentive."

p. 35. "Pairing of Males. "Males have been known to mate." Two of my male passenger pigeons mated with each other, notwithstanding they were in a pen where there were several unmated females desiring of mating."

p. 48. "An eclectus was observed in laying an egg at 7:26 P.M. She moved forward in the nest and held herself in a more or less erect position, when she dropped the egg. She lifted her wings a little just as I saw her do in laying a fresh unripe egg. Another Eclectus female stood up for 5 minutes after laying and then sat on the egg. She gave a few low calls shortly before laying."

p. 51. Table 5. Eggs hatched from "before 6 A.M." to 8:00 P.M.
Whitman, "Feathers 3", (1919)

1.53. Egg incubation. "The wild passenger pigeon... begins to
incubate a day or two in advance of laying, and the male takes
his turn on the nest first as if the eggs were already there.

A female passenger pigeon began to make a nest on a
Monday. She sat much on that day and almost constantly all day
on Tuesday. She was sitting again on Wednesday; on this latter
date the male seemed to be off duty and did not come near
the female on the nest, although she sat for a long time on the
nest during the middle of Monday and Tuesday. The egg was
laid after 4 p.m. on Wednesday. In another instance, a
female passenger pigeon was on the nest in the early morning.
The male sat during the middle of the day, as if he were
in charge for egg, though the nest was empty. I found the
female on the nest at 8 a.m. and she remained at from
this time, laying her egg at 4.52 p.m. of the same day.

In still another case a pair of passenger pigeons accepted a nest
on one day. On the nest, I saw the male on the nest
at 11.30 A.M. and he remained there until 3 o'clock,
perhaps until later. The egg was laid that day between
4 and 5 p.m.

1.55-6. Rotating habits. When female is sitting, the male
will roost as far as possible from her in the cage. This
instinct seems to be general among all species.

1.56. Alternation. A female passenger pigeon left her egg at
9:1 a.m. to feed for a few minutes. She did not offer to sit. The male saw
her, but did not offer to sit. She soon returned and sat
until about 10 o'clock, when he came and relieved her. She
remained off until 4 p.m. and then flew to the nest, but soon
walked off to a perch near by when the male did not
resume. At 4:15 P.M. this male, after having a few times
in recognition of his mate or to invite her to take the nest, walked off and flew to the further end of the cot; she at once took her place on the nest. It was interesting to see the males of several varieties—two fantails, an ostrich pigeon, and a common dove—all resigning their nest at about the same time, i.e., about 4 p.m.

p. 59. Copulation. (Of pigeons in general). Copulation persists practically up until the first egg is dropped and if then, or very soon after, ceases. Normally, there is no courting or copulation during the incubation period.

p. 60. Influence of temperature. That a low temperature suspends breeding in tropical and retards the process of breeding in all species is well known. The secretion of pigeons' milk is also checked by cold.

p. 61. Feeding and Care of Young. A female passenger pigeon left her young early in the morning at the age of about 8 days, and neither parent covered the young during the day, although the mother continued to cover the bird for two nights more. Two days later the parent birds began a new cycle. The young of this second cycle were left uncovered when 9 days old.

p. 62. Feeding of Young. States that pigeons become uncomfortable if the young will not take all the food offered.

p. 63. "If the young die, or if they are taken away, one may see after 4 to 10 weeks live; eagers, the parents are to relieve them selves of the food reserved for the young. They are ready to feed anything that will put its head into their mouths; they will often return to weaned young ... and feed them for a second time. They will try to feed one adult bird if that bird's head is only held in their mouth, and held low enough to simulate young in the nest."
Habits

Whitman, Unicorns 3(1919) p.68. Waiting for hatching. "The wild passenger pigeons never wait more than 10 or 12 hours, if the egg does not hatch within that time he leaves it; even if the shell is broken and the bird is nearly ready to hatch it is deserted. If young are put into their nests before they are due to hatch they are not able to feed them; much care in this matter is necessary. "Pigeon milk," as it is called, seems to be ready at the proper moment. Everything is well timed, and if there are young birds in the nest before this time arrives they will get no food."

p.89. The wild passenger pigeons... begins to incubate a day or two in advance of laying, and the male takes his turn on the nest just as if the eggs were already there. ... Ectopistes is very accurate in laying the period, for if the egg fails to hatch within 12 to 20 hours of its normal time, it is deserted, and that too if, as may sometimes happen, the egg contains a perfect young, about ready to hatch."

p.118. The nest-calls is a sort of a "caw." This call-note in Ectopistes is usually emitted once at a time, and it differs very much from the shriller and louder note of attack or threat."

p.143. "Sometimes the wings are thrown outward with a quick jerk, as if threatening to strike. Ectopistes does this when it settles."

p.119. "The passenger pigeon, when captured, emits a cry of distress or terror, and struggles hard to escape. If it finds its struggles of no avail, it will soon stop and often lie motionless in the hand, feigning death, for some moments after the hand is open. It will lie for nearly a minute on a shelf of left undisturbed."
p.120. **Courting and copulation.** The "call" /& p. consis to 2
no new distinct parts: (1) A loud, shrill, piercing squawk
(like "veh.", "blewe") in uttering which the bird draws back its
head and as its beak opens exposes all its throat in one effort. Just
as the cry is made the wings are flapped up and down. This
whole performance is precisely the same as the threatening-note. The
movements of the wings in this case are a means of attracting
attention; while in the threatening mood it appears to be a threat
to strike or to fly at the intruder. This loud cry, with wing flapping,
is adopted in calling a bird at some distance, and it is usually
followed after a few seconds with a second note. (2) This seconds
part is a single guttural sound, or a sort of awkward "cro",
in the making of which the bird raises its head, lengthens its neck,
and swells the upper part of it, as if the air were forced into
this part without being allowed to escape. Until this morning
& never quite caught the manner of calling.

p.120. **Copulation.** "The behavior in uniting" in the passenger-pigeons is
as follows: The female, if desired, often takes the initiative,
giving the call and then hugging the female while she
presses her body against him. He returns the call and
the hugging and billing. He raises his neck, so that the front of
his neck bears on the back of her neck or on the left of her head;
and after jerks or pulls her head towards him by means
of his beak, which is held like a brush over her head. He
may often mount several times before the female is ready.
When she is ready she stops and raises both wings to
support him. Sometimes she begins to stop only after
she has mounted, gradually and slowly bringing her body to
a horizontal position. The male expects her to raise her tail
(Whitman, p. 120) (copulation) to contract with his; if she does not 
at once do this he touches her with his beak, with a single stroke 
first on one side then on the other, or licks her beak near the head, 
as if to make her lower her head and raise her tail. It is more 
probable, however, that he does this to excite her to the point if 
responding to his movements. The pressure of the body and neck against 
the female is to induce her to active participation in the act. She pulls 
with the neck hooked over the head and the side stroke of the beak, 
as well as the pricking of the head feathers all tend to excitement, 
and they are the expression of the sexual impulse.

"I have never seen the female put her beak within that of the 
male, an act so common to other pigeons...

"A male Eclectus, when standing at a distance of a foot or 
two from the female, will often emit a loud squawk and 
rush towards her, and lay her with surprising speed, when he 
practises this in another species to which it is unaccustomed. He 
frightens the bird he would court. ... The Eclectus I had often 
offered himself in the usual way for her species, but the male I 
met with whom she was mated took the passenger's advice to be an 
attack, and though he usually retreated, he sometimes seized her 
and attacked her.

p. 140. Sociality. Young Eclectus insist on free roosting space and 
seek out intruders that come within reach. The young Eclectus never 
sleep side by side. They always claim free space as both sides - 
to or more inches. The morning hours do the same. This is 
interesting in relation to the fact that the passenger pigeons are well 
known to prefer company in roosting and in feeding, keeping together 
in large flocks. Morning-hours, on the other hand, seek a 
place apart for a meal; and only later in feeding or migrating 
are found in flocks."
p. 141. Fighting. "At first the instinct to fight may not appear at all during eating, although it is called out from the start on the nest; in the course of time they begin to claim food and to drive away those coming near. Adults begins this quite early. The disposition to fight and drive other birds from the neighborhood of the nest becomes strong as soon as nest-building begins, and is still stronger when the eggs are laid and after hatching. A young passenger huddled up, raised his wings, and settled fiercely at first when the fledglings in an adjoining pen were seen as the first egg was laid."

p. 144. Fear. Fear by one pigeon is communicated to all others within hearing. "Fear from my passenger pigeons have never had their feathers, having been raised by Mr. Whittaker, and although only 3 or 4 years old they have behaved as if less at home, and their fear has disappeared only very gradually and so slowly that I can but wonder at it. A returning dove which I obtained from Florida was far less timid and learned to eat from my hand with confidence in a few days. But the passenger pigeons, although I have compelled them to accept all their food from the hand, were very difficult to manage at first, and to this day they have not lost their fear of me. They were taught to eat quite readily from the hand, but they watched every movement of my fingers and often tried to get through the wire screen of the coop. At first, in order to break them in, I kept them in a large cage near my writing desk and spent much time in trying to get them accustomed to me. For weeks I could not go to the cage without alarming them; they would dash against the wire at reckless rate in trying to get away till they broke off the ends of their wing-quills and tail-feathers, and make their wings bleed from the wounds caused by flapping against the wire. I have lately allowed them to eat from the stuff and they have grown wilder, so that they now refuse to eat from my hand."
habits

Whitman, Figures 3 (1919) 145. Bathing. "I sedated a young
catoctins, a little more than 2 months old, take its bath
in a shallow grass basin, after tying the wattle by immersing
its neck and shaking it, it plunged in and gave itself a vigorous
shaking several times. After each shaking, it would lie over
on one side and lift up the wing. If the other side, stretching
it vertically or a little inclined and as far as it could reach,
I have often noticed this habit of lifting the wing during a bath
in other pigeons. They frequently perform these same motions
when it rains, especially if they are disposed to a bath. The wing
is raised so as to expose its under surface to the falling rain.
These movements are also often employed in running them-
selves.

p. 146. Sleep. "The passenger pigeon holds its head in sleep
somewhat higher, but drawn back upon the breast, so that the
neck is pretty well covered with feathers. The tail droops to
an angle of about 45°. In both passenger and common the
tail is held straight in the middle line of the breast.

p. 159. "The slip from instinct to intelligence." Removed eggs
to a distance of 2 inches outside the edge of the nest. "The
passenger pigeon leaves the nest when approached, but returns
soon after you leave. On returning, she looks at the nest,
steps into it, and sits down as if nothing had happened. She soon
finds out, by night, that something is missing. Her
instinct is clearly attuned and the acts quite promptly,
leaving the nest after a few minutes without locating the
egg. The conduct varies relatively little in different individuals.

p. 168. Results considered. "The passenger pigeon's instinct is used
up to a high point of unselfishness and promptness, and her conduct
is almost too blindly regular to be credited even with that
stupidity which implies a gain of intelligence. The ring-
Habits
dove's stupidity is satisfied with one egg, the dove-cock pigeon's stupidity may claim with eggs, but it is not always up to that mark.

Gregory, John G. History of Milwaukee, Wisconsin, Chicago-Milwaukee, Vol. 2 (1931) p. 1056. "The pigeons seemed to have a fondness for familiar localities, and when the lumber had been cut on Rogers' Addition as far up as Brady Street they reappeared there for two seasons. The ridge of land along the east side of the river opposite the dam... was originally wooded. After most of this timber had been cut to build the dam the pigeons would fly in a circle around the edge of the clearing, and many were shot there."

Madison (Wis.) Argus and Democrat June 26, '55. "Wild Pigeons." Daily large numbers are seen flying about the trees of Capitol Park and "pay but little attention to the passers-by."

Audubon. Vol. 1 (1831) 326. "I have only to add, that this species, like others of the same genus, immerses its head up to the eyes while drinking."


What impressed me indelibly... was the compactness of their flock formation, their great rapidity of flight, and their alighting maneuver as they shut into a large white oak standing alone in the corner of a pasture-field, about 350 yards from me. Flying toward the tree, slightly above its crest, the compact flock suddenly dropped almost straight down, enwrapped funnel-like nearly against the ground, and then rose sharply, almost against the tree-trunk, spreading into the branches above them."

During 1898 not an egg was laid by the passenger pigeons until July 4. One was laid on July 15, and the remaining pairs seem to have been active. Why they began so late I do not know. They were brought to Brookes Hole, May 25, and should have begun to lay in April at the latest. Probably I fed them too much corn or too much in general. I ceased giving them corn about the end of June and decreased the amount of seed given. I do not know whether the laying was brought about by the change, but think it probable.

In the season of 1899 the first egg from these birds was laid on Feb. 24, and the second on March 1. ... the hens have been in the pen outside all winter, and it is the coldest winter experienced here for many years.

p. 6. "The mating period (the portion of each reproductive cycle during which copulation occurs) has a duration of 5 to 9 days; in the majority it ceases its duration in 6 or 7 days. Apparently, no species differ in this.

Table 3. Length of mating period.

<table>
<thead>
<tr>
<th>Date of first egg</th>
<th>Length of period</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/29/96</td>
<td>9 days after pairing</td>
</tr>
<tr>
<td>8/29/96</td>
<td>6 days after first hatching</td>
</tr>
<tr>
<td>8/17/97</td>
<td>6 days after first courting</td>
</tr>
<tr>
<td>4/4/97</td>
<td>8 days after removal 1st egg</td>
</tr>
<tr>
<td>4/22/97</td>
<td>5 days after removal 1st egg</td>
</tr>
<tr>
<td>4/28/97</td>
<td>5 days after first courting</td>
</tr>
<tr>
<td>5/23/97</td>
<td>5 days after removal 1st egg</td>
</tr>
<tr>
<td>5/30/97</td>
<td>7 days after removal 1st egg</td>
</tr>
<tr>
<td>6/24/97</td>
<td>12 days after hatching young</td>
</tr>
<tr>
<td>8/16/97</td>
<td>7 days after pairing</td>
</tr>
<tr>
<td>7/20/98</td>
<td>7 days after removal 1st egg</td>
</tr>
<tr>
<td>7/27/98</td>
<td>7 days after removal 1st egg</td>
</tr>
</tbody>
</table>
7/25/98  6 days after hatching egg
7/31/98  6 days after removal of egg
8/12/98  7 days after removal of egg

p. 13. Periodicity of the disposition to fight. The disposition to fight comes on in all pigeons at the time of mating and choosing a nesting-place. ... My young male passenger-pigeon ... while meditated a kind of dance, strutted up, raised his wings, and added finery to the usual pigeons in an adjoining pen as soon as the first egg was laid.

p. 17. Mating behaviour. "In pressing his neck over that of the female, the long-wing acts as Ecto piki doo." "When ready to find a place to nest, many pigeons may be often seen to raise their wings as if to fly, and while the wings are thus raised they are wagged or moved a little and the head is stretched forward. This is common conduct in Ecto piki doo when it is ready to seek a place for a nest.

p. 21. It was abundantly evident from the following behavior that a pair of passenger pigeons was preparing for the second reproductive cycle. They flew several times against the wire of their cage and seemed to wish to get out in order to find a new place for nest. ... Two days later these passenger pigeons were very active, but not yet decided where to place the nest. The male was especially active, taking the lead in the search. He kept alighting on a small tree included in the large pen, and here he would put down his head and call the female. I repeatedly saw this pair flying about in search for nesting place. I note too, that when the male fluffed and flapped he called to his mate while on the wing. These birds stopped as if to fly and often, before starting, raise and lower the closed wings in the rhythm of flight. Here the flying movement is held in check by the knowledge of the bird that the window and wire were not pleasant things to fly against."
Habits

Fenton and Deardorff. The last passenger pigeons killed.


307. "...a little brook...where the waters were completely white...with feathers..." from...""

Thoreau. May 9, 1852. "...inquisitive necks..."


In the summer. "...like fashions of resting on their perch..." Silent. Sit up as if they had a wire drawn through..."

"and where it is very cold in the northern parts of America, here are small flocks of wild pigeons, which are very easy to shoot."


"The country abounded with diversitie of wild fowl, as turkeys, ... many doves, especially when strawberries are ripe."


Peter Forrester. Tracts vol. 2 (1638) 17.

"In the list of birds," "Pigeons."


Great flight of pigeons in 1675. Aminor.


Champlain, Maks. 1 (1622) 832. Maine, July 12, 1605.

Clayton, John. Letter to the Royal Society May 12, 1688.


Dudley's Dudley's statement,

Higginson, Francis. *New England's plantation* (1630) See Alexander Young.


Morton, Thomas. *New English Canaan* ... (1637).


History (Early)

Cartier, Jacques. Voyage de Jacques Cartier au Canada in 1534, p. 41. Annals July 1, 1534, saw an infinite number in Newfoundland. (Supposedly first mention).

Alphonse de Xainctonge, John. Hakluyt's Voyages Extra Sec. 8 (1604) 282. Power of the Spanish Armada for the space of 230 leagues. [Year 1542]. "Fowle there are in abundance, as custards, water geese, cranes, turtle doves, ..."


Massenhower, Description and first settlement of New Netherland ... Rev. Hist. N.Y. 8th ed. 3 (1850) 45. [p. 1625]. "The birds most common are wild pigeons; they are so numerous that they shut out the sunshine."

De Vries, David P. Voyages from Holland to America, 1632-1644. N.Y. Hist. Soc. Coll. rev. ed. 3 (1857) 90, 110. "There are many partridges, hawks, hares, and pigeons which fly together in thousands, and are people sometimes shoot thirty, forty, and fifty of them at one shot."

"Pigeons, at the time 1 year when they migrate, are so numerous, that the light can hardly be discerned where they fly ... they are not larger than little doves, and their bodies are exactly like those of the turtle doves in Flanders, except they have longer tails."


Mather, Cotton. The Christian philosopher ... London (1721) 188.

Nesting of pigeons. p. 142. Abundance, etc.
Habits


"At times and when they have had sufficient food, they are quite timid, especially the red 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."


But the most remarkable characteristic of these birds is their association together, both in their migrations and also during the period of incubation, in such prodigious numbers as almost to surpass belief; and which has no parallel among any other of the feathered tribes, in the face of the earth, with which naturalists are acquainted.

"... and since their appearance is so casual and irregular; sometimes not visiting certain districts for several years in any considerable numbers, while at other times they are innumerable."
Hybrid - Crosses.

Ames, C. H. Breeding the wild pigeons. F. Y. S. 56 (June 15, 1901) 464. Letter from Whitman, May 20, 1901. "I have crossed them with the little ring doves, and have some fine hybrids, all of which are sterile."

Whitman, C. O. Pigeons 2 (1919) p. 13. "In crossing the wild passenger pigeons... with the cage ring-dove (Streptopelea nisoria) I have not yet been able to get any hybrid..."

p. 10. Crosses: E. migratorius x [S. alba x S. nisoria] x (S. nisoria x S. alba)

8 males, all intermediate, infertile.

E. migratorius x S. nisoria. 2:3, shade pale, infertile.

p. 165. Migratoria x nisoria and alba: nisoria hybrids. High percentage of infertility; several embryos incapable of hatching were formed; and a notable fraction of the young died very soon after hatching. The offspring which survived were all males.

Migratoria x alba. "Two males were produced. The very first egg is the series and the last 3 of the season were wholly infertile.


p. 197. Japanese ring-dove (Streptopelea japonica).

p. 209. "The main distinction between the sexes of E. migratorius is that the female has a duller color, has more brown, is rather larger, and has more numerous spots on the wing. The male has apparently lost a certain number of these spots and has reduced the size of the rest, some of them being so minute that they can scarcely be seen."

Salvadori, p. 414. Turtur nisoria. [Collared Dove]. [Probable
The hybrid from the passenger x ring-dove cross, of which some 8 or 10 have been obtained, were all males. Two females these hybrids were a passenger pigeon and the mother a ring-dove. The hybrids (Plate 30) will perhaps best be compared with the male of the paternal species. An examination of the neck-mark attests that in this respect the hybrid stands as nearly intermediate between its two parents as is possible. The color of this region is lighter in the hybrid than in the passenger pigeon, and that is of course in the direction of the ring-dove. The passenger pigeon shows a plain iridescence on the sides of the neck. On the hybrid there is a slight iridescence; and it has in addition the differentiation of the feathers of the ring that carries it beyond the passenger pigeon in the direction of the ring-dove. The differentiation does not meet on the back of the neck as it does in the case of the ring-dove, but it extends farther towards the middle of the back of the neck than does the iridescent area of the passenger pigeon.

The tail of the hybrid is considerably longer than it is in the ring-dove but falls plainly short of the length attained in the passenger pigeon. The general appearance of the bird in size, color, and marking is intermediate. There are none of the black spots of the passenger pigeon shown distinctly in the hybrid, except in the feathers on the posterior border of the wing.
Hybrides

Mitchell, D. W. N. B. 1849, pp. 171-2. Mentions two specimens in the Collection of Z. Ectopistes migratorius ♂ x Turdus ruficollis ♀. They have neither the tail of Ectopistes nor the color of ruficollis, and to any one who was ignorant of their origin, would present indubitabla indications of at least specific distinction.

[Salvadori, p. 370, states that Thyron gregaria Bohem (Meusmouia 1855, p. 286; Vogelj. 1855, p. 258) is Mitchell's hybrid.]

Todd, W. E. C. Birds of eastern Penn. Pittsburg (1850) p. 267. Small (6 cm) black and white dravony ♂ single

Starr, E. S. Dover. Century Mag. 4th ser. 36 (1888) 703.

"Many attempts have been made to mate it with blue-rock and other ♂ the pigeons, in the hope of combining its endurance and unparalimed speed with their known intelligence and love of home. But without success, thus proving it to be not a pigeon, but a dove. It has, however, been bred with the Carolina dove, and the young, hatched again with the Carolinias, have proven to be fertile."

Average, M. F. Spermatogenesis ♂ normal and ♂ hybrid pigeons. Univ. Of Cincinnati Bull. 522 (1903) 43.

E. migratorius ♂ x Turdus ruficollis ♀. Testis small to extremely small. Both sterile.

Darwin, Charles. Variation in animals and plants under domestication, 1 (1896) 203. In London Book. Garden Ectopistes migratorius x Turdus vulgarius (Epeophila lucida turting) were sterile.
Illustrations of Equipment:

French, p. 182, "Pigeon," invented, patented and used by James V. Bennett, which effectively reduced the cruelty at the wholesale butcheries to a minimum.

p. 183, "Steel pigeon basket," constructed and used by Benet Ryneckson, Huntsville, Wyoming County, Pa.

French, p. 181, Henry W. Shoenaker, "The nets were made by hand, usually by traveling net makers, or by the trappers themselves during the winter months. Many of the nets in existence, also the atoles, the basets in which the steel pigeons were carried to the scene of operation, etc. Charles H. Elder has several such complete nets which he has secured at various times from old netters in Wyoming County. He presented one outfit to the writer of this article."


Harrow, H. T. S., 1880, 364. Advertisement and cut of "Harron's Pigeon Trap. Principle is new simple and effective." $4.00. For driving birds into the air.

Illustrations of P.P.


p. 411. "I have seen only five published plates representing
the fine Passenger Pigeons. Of these, the best to show
the form and carriage of the species is the photograph
of a young bird, by Professor Whitman (Wetmore, facing
p. 198). Puertas's figure of the male (Wetmore, frontispiece)
is a life-like portrait of this bird in an attitude of
alarm or anxious attention; the figure of the female
in 19127 this same plate is less representative. Wilson's
figure (the one reproduced in Cooke's Key) seems faulty
in many particulars, gives one a general impression of
sting, massive body, string wings and shoulders, short
leg and small head, all which is truly characteristic.

The figures in David, Brewster, and Ridgway (Vol. III, p.369)
and in Audubon, as attempts to show the bearing and
mannerism of the species, are quite worthless.

French, Sp. p. 82. "The flight of the wild pigeons." From the painting


Good drawing of pair at nest on oak branch. 2 eggs. One bird
has stem in mouth.

French, Sp. p. 223. "Each passenger pigeon." Died at Cincinnati,
0. 200, August 29, 1914.

E p. 246. Painted by Christopher N. Shearer of Rutherford in 1910-11.
Scene is in Berks Co. with Schuylkill River in middle distance.
In his youth he spent much time shooting and netting pigeons.
Bent (1932) Plate 83. "The last living passenger pigeon in the Cincinnati Zoo. Photograph taken and presented by Dr. William A. Herman."

"Habitat group of Passenger Pigeons, in Museum of Natural History, University of Minnesota. Specimen nest and egg collected by Dr. Thomas S. Roberts in 1874. Photograph presented by Doctor Roberts and the Museum.


Three excellent photographs from Bird-lore Vol. 16, No. 2, 1913,
an alert adult on square perch, next, and a squad.

Cole, A. H. What became of 2,250 of 2,700,000 passenger pigeons,
World's To-Days 18(1910) 531. Black photograph of one of Waitman's pigeons, ad, B, in reflush, facing left, in round perch.

"Copyright, 1903, by A. H. Cole.


1. Bird facing, head turned left, on square perch.
2. Bird on nest in a vine.
3. Bird on square perch, alert, facing to right.


Color plate 9 B, facing right on a stump. From Col. Ruthven Beane. Copyright 1910, by A. M. Munsford, Chicago.

Sheffield, R. W. Death of the last of the wild pigeons. Sci. Am.

Hornaday, W. T. Curr vanishing wild life. (1913) Frontispiece
of photograph of Martha on branch, back view, facing left.

"Copyright, 1911, by Enno Meyer.

Faxon, Walter. John Abbott's drawings of the birds of
Georgia. Amk 13 (1896) 215, to Plate 143 of male
Ectopistes migratorius. Water colors are in possession of the
Boston Society of Natural History. Abbott lived at Jacksons-
borough, Screven Co., Ga., about 65 miles N.W of Savannah
from 1790 - 1810.
Illustrations

Contains 2 photographs made by T. S. Tuttle at Welles PA, Mass. summer of 1898, of birds in the aviary of C. D. Whitney.


Same as on Cin. Zoos postcard.


2 5, 14.

Wetmore, Alexander. Game birds of prairie, forest and tundra.
Of last p.p. on square perch facing night. From Natl. Acad. Soc.
p. 497, plate XV. Painting of male p.p. on a branch and several in flight. Below them, a pair of mourning doves with nest and two eggs. Not good. By Allan Brooks.


Reproduction of painting of p.p. by E. D. Sawyer.
Appeared previously in Downe Conservation 7, no. 2 (1928);
Wildways 8, no. 2 (April-June, 1928); Downe Bird Life
3, no. 4 (Dec. 1933).

p. 365. Photograph, taken outside, of last p.p. pigeon killed

Pennant, Thomas. Arctic zoology. 2 (1825) Plate XIV out of 9 "Passenger Pigeon."
Illustrations


Whitman, C.O. Vol. 1 (1919) p. 25. Fig. 5. Chequers of juvenile male passenger pigeon. Fig. 6. Chequers of wing of adult female p. pigeons. p. 27. Fig. 7. Chequers of adult male passenger pigeons.


Plate 29. Colored plate adult female.


Dümming, H. Illustrirte Tierleben ... Milwaukee (1879)

Crudle colored plate no. x of p. 168. showing 2 pairs sitting in trees.


California, Mark. "The natural history of California... Vol. 1 (1781) p. 23. Colored plate of single bird, B, on small oak twig."


Male (with scarcely any coloring, The golden sheen on sides of neck is represented by pink and the breast has a slight wash of brown. No other color. The unnatural scaly aspect appears in the original. Outer tail feathers erliche. Must be an immature.


Naeuman, E. R. Vanished Assets.

Very similar to plate 28, Vol. 2 of Whitchman (1919)
Adult B. P. pigeon
Whistlers. Vol. 2 (1919)

Illustrations


Nathaniel, A manual of the ornithology of the United States ... Vol. 1 (1832) p. 629. Attractive woodcut of single bird with others, diagrammatic, in flight.

Roberts, T. S. Birds of Minnesota. 1 (1932) p. 578. Photograph of pair of p. pigeons and nest with one egg in small oak. Fig. 235.

p. 580. Fig. 236. A young Passenger Pigeon in the usual, general plumage. Drawn by Mr. Beebe from a specimen in the Museum of the University of Minnesota. Plate 41. Female and male on oak branch with pair of Mourning Doves below them. (Indifferent),
Illustrations


Plate 19, colored, protologue, crop, greatly diluted.


Small (6 cm.) b. & W. drawing of single bird by

H. M. Sutton.

Wilson, Alexander. American ornithology. Phila. 5 (1812)

Plate of p. 103. Male on lower stump. (No perceptible

notch in bill).

Wright, A. Hagen. The Passenger pigeon. Youth's Companion

35, no. 6 (Feb. 9, 1911) 75. Excellent color cut of single

bird about 2' high.

Virchow. W. A history of British Birds. 2 (1843) p. 272. Cut of single bird, back view head turned to right. 8.5 cm. (Rod.

Buffon. Plate 176. Poor ill. of female.


Plate 188. The same section, male

49. Female, resembling a young male taking

euc adult dress. (Bonaparte (1825).


374. Plate inserted by John R. Forster. The dark

middle tail feathers are shorter than the outer 2:2.
Warren, B. N. Birds of Pennsylvania. (1890)

op. p. 232. Plate 71, no. 3, poorly colored male; Plate 22. Very much shorter than 1, 1.

Plate 175, "Tourterelle de la Caroline" Ecophiles 8.
Both poorly colored.


Poor drawings.


Hegner, Robert. Parade J the animal kingdom.
N.Y. (1940) p. 447. Good photograph taken by himself of one of the last survivors J Whitman's flock.


Examined the plate at Mc Gill University. Obviously a juvenile. Very little color. Woover parts light brown.

Small iridescent spot on its side J its neck.
Whitman. Pigeons 2 (1919) 204-5. "I have studied the incubation period of the eggs of the wild passenger pigeons... and have also obtained data on the length of this period when the passenger male was paired with ring-dove females. This pigeon has the shortest incubation period known among doves and pigeons. The period is here a little less than 13 days; it averages 12 1/2 days (see Table 187). This is shorter period than that of the ring-dove, in which, as we have seen, the period is 14 to 15 days. The passenger pigeon's incubation time is nearly as much shorter than that of the ring-dove as the period of the latter is shorter than the common pigeon. What is the effect on this incubation time of uniting the male passenger pigeon and the female ring-dove? The answer from our data is as follows: The answer from our data is that the first egg the period is 14 days plus 20 hours; for the second 13 days plus 6 to 20 hours (see Tables 188 and 189). These figures come close to the normal range for the ring-dove; still I can not help feeling that there is some influence, however small, exerted by the male on the rate of development...

p. 207. Table 207

\[
\begin{align*}
\text{Incubation} & \\
& (13 \text{ days, less a few hours}) \\
& (12 \text{ days, 12 to 18 hrs.}) \\
& (12 \text{ days, 12 to 18 hrs.}) \\
& (12 \text{ hrs. 15 mins.}) \\
& (\text{less a few hours})
\end{align*}
\]

p. 41. Pigeons 12 1/2 days; common pigeon 17-19 days; ring-doves 14 to 16 days. p. 42, Table 3. 11 eggs ran from 12 to 13 days. Portable length 12 1/2 days.

p. 48. The egg is escaped in the afternoon. p. 45, Table 4 shows from 4:00-6:00 P.M.
Incubation.

Audubon, Vol. 1 (1831) 326. During incubation, the male supplies the female with food. Indeed the kindness and affection displayed by these birds towards their mates, are in the highest degree striking.

Ford, John, Passenger pigeons. Harbours Mag. 32 (1848) p. 135. Wood cut for single pigeons and others in flight.

Hodge, C. F. Pigeon investigation. F. Y. S. 74 (May 21, 1910) 312. Prof. Whitman writes that the incubation period is 12 1/2 days.
Indian

Sarah Whitmore's captivity in 1782. Pub.
Buffalo Hist. Dec. 6 (1803) 517-8. Re pigeon nesting on the
Seneca R. in 1782. "For this reason, annually, the Indians
assembled here for days and weeks together. The young birds
were fat and juicy, and were devoured in large numbers;
while the squaws smoked and cured great quantities of
them for future use. Consequently, with the Indians, the
"Pigeon Root" was synonymous of a feast and dance, and
especially in council."

Proctor, Thomas. Narrative of Journey to the Indians of the
Buffalo, N.Y. "Red Jacket and Captain O'Call came to see
me, when the former acquainted me with the reason why
no council would be held this day, to wit: that it was
their pigeon time, in which the Great Spirit had bles-
sed them with an abundance; and that such was his goodness
to the Indians that He never failed sending them season
after season, and although it might seem a small
matter to me, the Indians will never lose sight
of these blessings."

Malin, Peter. A description... Aug. 28 (1911) 61. While
birds are hatching their young, or while the latter are not
yet able to fly, the savages in North America are in the
habit of never shooting or killing them, not of allowing
catchers to do so, pretending that it would be a great pity
on their young, which would in that case have to starve to
death. Since 1768, the Frenchmen told me that they had set
out with the intentions of shooting some of them at that season
of the year, but that the savages did at first with
Indians

kindness endeavored to dissuade them from such a purpose, and later added threats to their entreaties when the latter were of no avail."

Wilson and Bremer. Am. ornithology 2 [1877] 254. By the Indians, a pigeon roost, or breeding place, is considered an important source of national profit, and dependence for that reason; and all their active ingenuity is exercised on the occasion.


"Some of the young Siouxs were watching the roost, to see if any had commenced laying, for some were already building nests, and when I told Mr. Reed of the Indians being there and not a shot fired at the pigeons, he told me that the Indians never disturbed pigeons or ducks by shooting at them while nesting, and that the life for man doing so would not be safe among the Siouxs, as the whole tribe would feast upon the squabs as soon as big enough."

of French p. 321. "Eating & Reckoning"

Radin, Paul. The Winnebago Tribe. 37th Ann. Report. Rush. Am. Ethnol. [1923] pp. 112-3. Pigeons were obtained for the "chief feast" by foolish them from the nests with long poles. "After it is unnecessary to hunt for them after a storm because large quantities die from exposure to inclement weather."
Fischer, Morris. A vanished race. Bird Lore 15 (1913) pp. 81. "Among the wild enemies of the Pigeon, indeed the most dangerous of them, was the Indian who lived upon the flocks wherever he found them."


Lé Jeune, Paul. Relation of what passed in New France in 1636. Jesuit Relations 10 (1847) 143, 287. "At the feast of the Dead, which takes place about every twelve years, the souls quit the cemeteries, and in the opinion of some are changed into Turtle doves (Turtur turtur), which they [融为一体] pursue later in the wood, with bow and arrow, to broil and eat."

Same thoughts expressed p. 287.

Montanus, A. Description of New Nederland (1671) Doc. Hist. N.Y. 4 (1851) #123. "The pigeons fly in such flocks that the Indians designately remove to their breeding places, where the young birds, pushed by hundreds from their nests, serve for food during a long month for the whole family."

Smith, Col. James. An account of the remarkable occurrences. Cincinnati (1807) p. 10. "Remark of Delaware Indians to Smith: 'He said the Indians spied them every day, and he showed me by making marks on the ground with a stick, that Braddock's army was advancing in very close order, and that the Indians would surround them, take trees, and (as he expressed it) shoot them down all once pigeon.'"
Indians.

Somers, A. N. Prehistoric Cannibalism in America. Popular Sci. Month. 42 (1892) 204; in S.A. Barrett, Ancient Aztecs, Milwaukee (1933) p. 386. Among the bird bones found were those of the passenger pigeon.


Wright, W. F. Milburn. An interview with Capt. Johnson. Pub. Buffalo Hist. Soc. 27 (1923) 424. Tobacco smoke used to profanitate the pigeons. Before putting the tobacco smoke in the fire a brass bettle or other small dish filled with incense, incense, and various other items were deposited on the ground and left as a payment to the pigeons for eating their young. [Sunsan myths and folk tales].

Wood, William (1634). 'Indians fetch whole Coades of them' from nesting.


Nesting near Kane, Pa. Carcasses left in Indiana and thousands of trees to get squabs.

De L'Isle. Pigeons - man, others. F. Of S. 73 (1909) 212,

shooting pigeons with arrows, etc.
[Bishop, Louis E.]. Pigeons by the million, N.Y. Times May 9, 1886.

The same ruthless hunting of the birds on and off their nests, by night and by day, which is now going on in the present resort, was carried on in 1880 by a much larger force of law-breakers, but after all their destruction it could not be discovered anywhere in the woods, where the trees contained apparently one less bird than they did before the slaughter began. A gentleman who visited the Shryg Creek region recently says that one cannot walk in any direction or road through the woods without coming upon scores of dead or wounded pigeons. The McKean Arm Club ... are taking measures to send representatives to the roosting and nesting grounds to arrest all persons guilty of violating the strict game laws. During the past year [5] that this law in regard to wild pigeons has been openly and notoriously broken in this part of Pennsylvania a single arrest of an offender has never been made.

Barrow, W.B. Michigan bird life. (1912) p. 246. There was early legislation protecting nesting. In 1897 the legislature enacted a law prohibiting the killing of the Passenger Pigeon at any time of the year, for a period of three years, and in 1905 the Passenger Pigeon was removed from the class of game birds to that of non-game birds, so that its killing at the present time is illegal at any season. The prohibition, however, appears to have come too late...

Editor, Interesting to help shooters. Forest & Stream Chicago Field 9 (1878) 136.

The large shipments from Petoskey, Mich. nesting. "In the face of these facts the question is how long before the birds will be exterminated and ought not measures be adopted to stop the killing of them during their nesting."

Roney, W.B. The importance of more effective legislation...

Chicago Field 9 (Feb. 16, 1878) 9-11

...A description of the pigeon nesting 1878... cited 10 (Jan. 11, 1879) 345-7. Legally in violation and attempts to enforce the laws
One trapper was arrested and fined $50 for sitting within the nestings. This is one of the few cases on record.

Deane, R. Additional records of the p. pigeon. ... Arch 14 (1897) 316.
Letter March 2, 1897, from Chauncey S. Osborn, State Game and Fish Warden, Mich.: "I have a bill in the legislature of Michigan closing the season for killing Wild Pigeons for ten years."

Gunn, C. W. Eclogites migratoria. ... Vol. 2 (June, 1876) 26.
Spend a week shooting at the Selby, Mich. 1876 nesting.
"The laws of the state prohibit any person from shooting, during three miles of the nesting places, or nesting within two miles, and the law is strictly enforced."

Dupuy, Ordinances 9. Aug. 8, 1727 against the firing of guns in the city of Quebec.

Stone, Witch. [The last passenger pigeon]. Arch 31 (1914) 566.
"The reduction of this once abundant bird to absolute extermination by man is a great lesson to us all and stirs all opposition to the efforts now being made by national and state governments in behalf of the conservation of other birds threatened with a like fate. What is a little loss of sport to us compared with the extinction of a wild species - something that the hand of man can never replace?"

From "Tramp: A Pigeon roost." Red and White 8 (June 3, 1876) 49.
Selby, Mich. nesting 1876. "However, they were protected by a law which prohibited shooting within five miles of the nestings, and trapping or netting within two miles; a law that was partly carried out. Two netters, by the names of Utley and Bedley, were fined each $50 and costs, amounting to $60, for netting inside the limits, and I understand several others were fined at another town near the nestings."

Massie, E. Z.
Dupuy.
Wild pigeons used to be innumerable ... As late as the year 1720, an act was passed, fining 5s. for shooting pigeons, doves, or partridges, or other fowls (birds) in the streets of Philadelphia, or the gardens or orchards adjoining any house within said city.


Watson, John F. Annals of Philadelphia. Phil. (1836) p. 240. "As late as the year 1720 an act was passed, fining five shillings for shooting pigeons, doves, or partridges, or other fowls (birds) in the streets of Philadelphia, or the gardens or orchards adjoining any houses within said city."

Editor. The protection of wild pigeons. F. S. 7 (Sept. 21, 1876) 104. Editorial over a column long. The only known organization that has taken steps to prevent the slaughter in the state is the "State Sportsman's Association of Michigan," which Rev. Holmes, of Grand Rapids, is President."

Deplores the slaughter of tens of thousands of pigeons on their nesting grounds. He also adds: "When the birds appeare all the male inhabitants of the neighborhood leave their customary occupations as farmers, bee-kinders, oil-seeders, millers, and tavern loafers, and join in the work of capturing and marketing the game." The Pennsylvania law very plainly forbids the destruction of the pigeons on their nesting grounds, but no one pays any attention to the law, and the nesting birds have been killed by thousands and tens of thousands."
Elroy Plain Talker March 8, 1878  (Editorial).

Pigeons. As there is now a bill before the State Senate to repeal the obnoxious pigeon law passed last winter, we presume that it will not be considered out of order for us to once more discuss this subject in our columns. As we have referred to this law so often heretofore, it will be unnecessary for us to give the wording of it as it stands, therefore we will proceed to the discussion of our subject.

There are, as many of our readers well know, but few pests that farmers dread more than they do wild pigeons and yet the members of the Legislature of the great state of Wisconsin last winter saw fit to pass this law, notwithstanding that hundreds of families in the state might be left without food and to the charity of the public if this law were to be strictly carried out. It is a notorious fact that pigeons when in such numbers as usually congregate at a roosting ground, will do as much damage to a field of new corn grain, as does the grasshopper when it is in a more advanced state.

Now allowing this proposition to be true, it follows, as a natural sequence, that justice demands a law for the protection of the one, if there is for the other. Now let us see who are the interested parties in this controversy. First, the farmer who is liable to suffer thereby, losing property and means of support from these savages. Second, the sportmen, who wishes to have pigeons plenty, so that he will derive more pleasure from his sport; third, the express companies who expect to, in the future, reap a rich reward, in the carrying of them to market. Now the last named of these interested parties are wealthy, and able to pay for lobbying against this bill, while the other interested party, the farmer, has no means to pay for lobbying.\"
Palmer, T.S. (1900)

  "It shall not be lawful to shoot ... save and except ... wild pigeons ..."

- p. 89. Quebec, Statutes 1894, chap. 24, sec. 1401, p. 73. "No protection for wild pigeons."

  "Whoever takes or kills ... a wild or passenger pigeon ... between the first day of May and the first day of October, shall be punished by a fine of ten dollars for every bird so taken or killed."

  [Provides for the protecting pigeons until after 1905].
Ohio. Revised Statutes, 1897 (as amended by General Acts of 1898, Vol. 93, sec. 6961, p. 106. Passed April 12, 1898. [Prohibits killing, maiming, or discharging firearms at any wild pigeon while it is on its resting ground or at its roosting place, or breaking up or disturbing any pigeon roost or resting place, or the birds therein, or discharging any firearm within one-half mile of any pigeon roost or resting place, or disturbing or destroying any pigeon eggs or nestlings under penalty provided in section 6968.]

New Hampshire, Public Statutes, 1891, chapt. 132, sec. 6, p. 365. "If any person shall maliciously take from the nest and destroy the eggs or young of ... wild pigeons, he shall forfeit and pay, for every egg or young of any of said birds so taken and destroyed, the sum of two dollars.”

Sunn. Bureau, above thermometer.

W. G. McMillan (1902)

Frank B. Himes, Edmuns.

Cash Up.
Wild pigeon

Writers protected Mass. 1848. Chap. 85
(still in force in 1902)
New York 1862, sec. 5. 1 mile
1867

Not Michigan 1869, No. 124, sec. 9. 1/4 mile

Not Massachusetts 1870. Amended Sept. - Nov.

Not Pennsylvania 1878, sec. 15. 1/4 mile. The license for nonresidents trappers (act June 3).
Penn. law 1930, says 1 mile (still in force in 1950).
Wisconsin 1877, Revised 1883, 1887.

Mich. 1897, prohibiting killing of pigeons at any time.

Merrim. p. 224, Berglio's Anti-Pigeon Bill. 1881 to prohibit trap shooting.
See editorial P. 45. (July 14, 1881)

General Laws. 1854. 1848, chap. 85, p. 460.

Sec. 1. If any person shall attempt to kill or frighten pigeons from beds made for the purpose of taking them in nets, by firing guns, or by any other means, within one hundred yards of the same; except as lands owned or occupied by himself, he shall forfeit and pay to the owner or occupant of such lands, or to the owner or occupant of such beds, the sum of ten dollars, in addition to the actual damages sustained, to be recovered by such owner or occupant in an action trespass."
New York

Game, 1862, Chap. 474, sec. 1, art. 4, p. 874.

"No person shall kill or catch, or discharge any
fire-arm at any wild fowl while in any nesting
ground, or break up, or in any manner disturb
such nesting ground, or the nests of birds therein, or
discharge any fire-arm at any distance within
one mile of such nesting place."


Same except distance 'one-fourth of a mile.'
1875 P.L. No. 115, p. 149,

Sec. 9. No person or persons shall use any gun or guns, or
fire-arms, to maim, kill, or destroy any wild pigeon or pigeons,
at or within five miles of the place or places where they are gathered
in bodies for the purpose of brooding their young, known as pigeon
nestings; and no person or persons shall use any gun or guns, or
fire-arms, to maim, kill, or destroy any wild pigeon or pigeons
within their roostings anywhere within the limits of this State;
and no person or persons shall, with trap, snare, or net, or in any
other manner, take or attempt to take, or kill or destroy, or attempt
to kill or destroy, any wild pigeon, or pigeons, at or within two
miles of such nesting place at any time from the beginning of the
nesting until after the last hatching of such nesting, anywhere within
the limits of this State; and every person offending against the
provisions of this section, or any part thereof, shall be subject
to a penalty of fifty dollars, with costs of suit.

Approved April 23, 1875.
1869 P.L. No. 124, p. 213,
Sec. 9. No person or persons shall use any gun or guns, or
fire-arms, to maim, kill, or destroy any wild pigeon or pigeons,
at or within one-half mile of the place or places where they are
gathered in bodies for the purpose of brooding their young, known
as pigeon nestings; and no person or persons shall use any gun,
guns or fire-arms, to maim, kill, or destroy any wild pigeon or pigeons
within their roostings, anywhere within the limits of this State; and
every person so offending against the provisions of this section, or
any part thereof, shall be subject to a penalty of fifty dollars, with
costs of suit.
Michigan

Public Acts, 1897, No. 159, sec. 14, p. 201. "It is
shall be unlawful to injure, kill or destroy any wild
pigeon until the year nineteen hundred and fifty, and
then only from October first to December thirty-first of
each year;"

sec. 19. (p. 202). "No person or persons shall in any manner
whatever or at any time injure, capture, kill or destroy
any wild pigeon or pigeons at or within five miles of the
place or places where they are gathered in bodies for the
purpose of brooding their young, sometimes spoken of as their
nestings or rookeries, or within five miles of their
nestings, and then only without gun and not until
after the year nineteen hundred and fifty."
Ohio

General and local acts, 1886, House bill No. 393.

Sec. 6965. p. 188. Whoever kills, maims, or discharges any fire arms at any wild pigeons while on its nesting ground or at its roosting place, or breaks up, or in any way disturbs any pigeon roost or nesting, or the birds therein, or discharges any fire arms at any wild pigeons within one half mile of any pigeon roosting or nesting place, or disturbs or destroys any pigeon eggs or nestlings, ... "punished as herebefore provided in section 6968."
AN ACT

To Protect Wild Pigeons while Roosting or Nesting in this State.

Section 1. Be it enacted by the General Assembly of the State of Ohio, That it shall be unlawful for any person to kill, catch, or discharge any fire-arms at any wild pigeon or pigeons while on its nesting-ground, or at its roostings, or to break up, or in any manner disturb such pigeon roost, nesting, or the birds therein, or discharge any fire-arms within one-half mile of such nesting or roosting place, at any wild pigeon or pigeons, or catch with nets within said limits, or shoot at, maim or kill any wild pigeon or pigeons within their roostings, or in any manner destroy the eggs or birdlings of said roostings anywhere within the limits of this state. And every person so offending against the provisions of this act, or any part thereof, shall be guilty of a misdemeanor, and on conviction thereof shall be fined in any sum not exceeding fifty dollars, or imprisoned in the county jail not less than three nor more than thirty days, and shall, moreover, pay the costs of prosecution.

Section 2. This act shall take effect and be in force on and after its passage.

Passed March 14, 1876.

C. H. GROSVENOR,
Speaker of the House of Representatives
H. W. CURTISS,
President pro tem. of the Senate

Amended in 1877, 1883, 1886