

A HISTORY OF THE PASSENGER PIGEON IN MISSOURI*

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THE Passenger Pigeon (*Ectopistes migratorius*) has been extinct for nearly half a century. But, long before its final disappearance, Missouri's skies were sometimes dramatically filled with flocks of pigeons, and oak-hickory forests of the state once fed a share of these wandering avian armies.

This account is a report of the misfortunes of the Passenger Pigeon in Missouri, as revealed in histories, diaries, travelers' journals, and popular lore. To so complete a general history as that of Schorger (1955), I can add only the richness of local material and a clarification of certain details. Abundant new material undoubtedly awaits the searcher into early newspapers and market records.

Records have been arranged chronologically by decades and, when possible, by years within the decade.

Early days. Many quotations from early French explorers in the Mississippi valley may be found in Wright's papers (1910, 1911). As a rule, it is difficult to place such quotations with much geographical precision, but two identifiable references may be mentioned. Granvier (Thwaites, 1896-1901 (65): 109-111) wrote from below the mouth of the Ohio River, October 1700: "We saw so great a number of wood-pigeons that the sky was quite hidden by them." In 1750, Vivier (*ibid.*, 69: 145) credited the country in the latitude of St. Louis with wild pigeons in "the autumn through the winter, and during a portion of the spring."

1800. While at Dubois River, Illinois, waiting to begin their ascent of the Missouri River, Lewis and Clark (1893: 1282) noted on 12 February 1804: "Pigeons, geese, and ducks . . . have returned."

In travels northward on the Mississippi, before he began his great southwestern journey, Pike found a nesting colony of pigeons. In his journal for 28 April 1806, he wrote (1895 (1): 212):

Stopped at some islands about ten miles above Salt river, where there were pigeon-roosts, and in about 15 minutes my men had knocked on the head and brought on board 298. . . . the most fervid imagination cannot conceive their numbers. Their noise in the woods was like the continued roaring of the wind, and the ground may be said to have been absolutely covered with their excrement. The young ones which we killed were nearly as large as the old, they could fly about ten steps, and were one mass of fat; their craws were filled with acorns

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and the wild pea. They were still reposing on their nests, which were merely small bunches of sticks joined, with which all the small trees were covered.

Met four canoes of the Sacs [Indians], with wicker baskets filled with young pigeons. . . .

Bailey (1939) placed this nesting in Pike County, Missouri; Schorger (1955: 124) referred it to Pike County, Illinois. Unless one is fairly certain as to the size of the island involved and the precision of Pike's estimate of distance above Salt River, it is probably not possible to decide to which state the nesting ought to be accredited. At any rate it is a matter of political, not pigeon, geography.

Although Lewis and Clark from May to July followed the Missouri River to the northwestern corner of the state, and Pike's party ascended the Osage to the western border of Missouri in July and early August, neither group made further remarks about Passenger Pigeons. There were acute and interested observers in both groups, and such circumstances tend to substantiate the suggestions of Schorger (1955: 257; *in litt.*, 1956) that Missouri was outside the main nesting range of the pigeon.

Christian Schultz (1810 (2): 17-18) stopped at the mouth of the Ohio on the Missouri side, 24 October 1807. Large groves of willows along the mud flats of the river "at a distance had the appearance of having suffered from a hurricane or tornado, but . . . I discovered that this scene of destruction had been committed by a tribe of the feathered creation! Here was a space of about forty acres of willows which had not only all the branches broken off, but likewise many of the middling sized saplings were bent to the ground, while the surface was literally coated over with dung and feathers. I soon discovered that this was a pigeon roost, and that, from the myriads which come every evening to the same place, the branches are crowded at every twig, until, by the increase of weight, they are broken off." Schultz (*ibid.*, 85) again saw pigeons just north of the Ohio's mouth on 6 March 1808, the "woods being literally covered with them."

1810. When Audubon was camped across the Mississippi River from Cape Girardeau in December 1810 (Audubon, 1942; 1831-39 (4): 538), pigeons, among other game, were killed. He apparently saw no great flights.

At the Nodaway River, on the Missouri, 18 April 1811, John Bradbury (1819: 68-69) wrote:

I proceeded to examine the neighboring country, and soon discovered that pigeons . . . were in the woods. I returned, and exchanged my rifle for a fowling-piece, and in a few hours shot two hundred and seventy-five, when I desisted. I had an opportunity this day of observing the manner in which they feed: . . . an example

of the rigid discipline maintained by gregarious animals. . . . One of these flocks, when on the ground, will cover an area of several acres . . . the birds so close to each other that the ground can scarcely be seen. . . . that all may have an equal chance, the instant that any rank becomes the last, it rises, and flying over the whole flock, alights exactly ahead of the foremost. . . . there is a continued stream of them in the air.

About the same place, on 7 May 1811, Brackenridge (1816: 75) also killed some pigeons. If either of these men saw other pigeons during the rest of the Missouri part of their journeys up the Missouri River, they made no mention of it.

Schoolcraft (1821: 22) saw pigeons while in the Bryant Creek area of Douglas and Ozark counties, 21 November 1818, but he assuredly did not see them in spectacular numbers during his long midwinter journey in Missouri and northern Arkansas.

1820. From Warren County, Duden (1829: 150) wrote in 1826: "Wild pigeons appear at times in swarms which darken the sky like storm clouds. The branches of trees break when they sit down." That Duden's statement was no exaggeration may be gathered from a contemporary newspaper item. Despite the injury done by the drought, the St. Louis "Missouri Republican" (Anon., 1825) assured its readers on 10 October 1825, "there can be no apprehension of starvation, if we may judge from the number of wild pigeons daily passing, and the quails, that are running about our streets and flying into houses in order to escape the pursuit of boys."

1830. Prince Maximilian killed some pigeons when on the Missouri, near the mouth of the Kansas River, 21 April 1833 (Wied, 1839-41 (1): 272). In assessing his observations on American birds, Maximilian later wrote (Wied, 1858: 425): "On the Missouri the specimens which we killed in the autumn and which stayed in the high poplar woods had filled up their crops with the fruits of these trees." If the latter reference was meant to apply to the state of Missouri (Schorger, 1955: 41), Maximilian supplied the wrong date, for he was not in Missouri in autumn (Wied, 1839-41); Schorger has suggested (*in litt.*, 1957) that he meant poplar catkins (not seeds), in the spring of the year.

Townsend (1839: 126) observed "large flocks of wild pigeons passing over" 31 March 1834, in St. Charles County. Hesse (1946-48 (41): 171) wrote from the lower Osage River about 1835 that the "passenger pigeon arrives in spring and fall. Some flocks at times stay for weeks in the forests."

1840. Audubon shot two wild pigeons near St. Joseph in early May 1843 (Audubon and Coues, 1898 (2): 473, 475). He saw no large

flocks of pigeons while on his round-trip tour of the Missouri River in that year.

Mark Twain (1924) remembered roosts of "millions" of pigeons near Hannibal in the 1840's; guns were not necessary, and clubs were used to kill the birds at night. An early settler of Callaway County told (Anon., 1884b: 140) of "a few pigeons" being among animals killed in the 1840's in a spring hunting contest to relieve young corn from pest damages.

1850. On 30 September 1851, a St. Louis newspaper reported (Anon., 1851a):

Wild pigeons, in immense flocks, continue to pass over our city. As an article of food, these birds are no longer a luxury,—they overstock the market, and for cheapness recommend themselves over every other species of flesh or fowl. Our population, too, have become a sporting population, as is evinced in the continuous and deafening discharge of fire-arms in the vicinity [*sic*] of the city each morning, for several hours. On some days, no one who has not seen them, can form an idea of the large numbers of pigeons that fill our woods. . . . We hear every day of instances when a single shot has brought down from ten to fifteen birds, and . . . as many as twenty-six. . . . a friend of ours, a few days since, in the course of three or four hours, bagged some ninety-six birds.

Pigeons apparently left and then returned, for on 24 December 1851, the same newspaper recorded (Anon., 1851b):

Immense flocks of wild pigeons have been, for the last few days, in the woods west of the city. A resident in the country says he saw a flock day before yesterday, at least half a mile long, and many thousands in number. They have been so numerous as to break the small limbs of trees when they alighted. It is a singular thing to see them in flocks at this season.

I believe that there is in this report an understanding that pigeons were properly fall and spring migrants. When Kurz visited the St. Louis region, he wrote (1937: 340) 25 May 1852, that the "season for passenger pigeons . . . was already over."

Pigeons visited Harrison County in immense flocks, according to A. F. Woodruff, who arrived there in 1858 (Wanamaker, 1921: 305). Limbs would be broken from trees, and hunters killed the birds by the thousands.

Moniteau County was also the site of large roosts in the fifties (Ford, 1936: 76), and to those roosts, pigeons had been coming for many years.

When it [the pigeon] did come, it came in countless thousands. A roosting place was selected, and all returned to it at night. In the daytime they separated into droves and foraged from thirty to fifty miles from the roosting place. . . . About six miles northwest of California is what is known as the pigeon roost country. . . . The signs still remain in the broken timber and the wonderful richness of the soil. . . .

In 1852 the pigeons had a roost on the Gravois, about twenty miles south of California. . . .

The greatest of the flights was in 1859 [not seen by the narrator, as he was absent]. . . . At that time the roosts were about ten miles south of California near the Burris fork. . . . The dead birds were brought to the town by the wagon load, and as the railroad had then reached the town, they were shipped to St. Louis by the carload.

1860. An intelligent account of the last days of the Passenger Pigeon in the Newton County region has been written by Britton (1929: 51-60), based on his own memories. He saw immense flocks up to the time of the Civil War. They came to eat mast, competing with the hogs, and stayed in the fall until freezing weather came, the flocks increasing in size until they covered the visible horizon for an hour or so at a time in the afternoons. They passed through the country again in March. They gave no trouble in corn fields, and nesting, if Britton makes no mistake in his report, was not at all colonial. Late in spring, as the mating and nesting season came on, they "were seen in pairs by those having occasion to be hunting or passing, in the most inaccessible woods or forests." He considered those nesting in his region as mere stragglers from areas more densely populated by pigeons. Excreta accumulated to a depth of two or three feet after an area was used for several years by roosting pigeons. In the 20 years following 1883, Britton traveled in all the timbered country of southern Missouri, northern Arkansas, and western Tennessee without seeing a single pigeon.

Feed lots around cow barns were full of pigeons during the winter in Cooper County as late as 1862 (George, 1911). In the late fifties and early sixties, great flocks came to a large roost on Moniteau Creek—a tract that was still (1911) known as "The Pigeon Roost."

They would start out early in the morning for their feeding grounds and in the afternoon, about four o'clock, they would begin returning to this roost. From that time until it was too dark to see, I have watched that unbroken line stretched against the sky as far as the eye could reach. . . . I remember thinking it looked like some mighty river winding its way through the air.

An immigrant Englishman who lived in Van Buren County, Iowa, kept meticulous records of birds and mammals killed and seen from 1856 to 1863 (Savage, 1933-37). He mentioned pigeons on the following dates: 2/21/60 ("flock"), 4/1/60, 9/16/60, 4/5/61, 7/31/61, 8/12/61, 3/15/63 ("pigeons plentiful"), 3/20/63, 4/5/63, 4/6/63, 7/4/63, 7/18/63, 9/6/63, 9/26/63, 9/30/63, and 10/4/63. For this Iowa county that borders Missouri's northeastern counties of Clark and Scotland, it will be seen that of 16 records, there are no real winter

dates; the records fall as follows: one for February, two for March, four for April, three for July, one for August, four for September, and one for October. I am not certain that Savage's pigeon records were as complete for the early years as for 1863—if they were, he saw none in 1856–59 and 1862. Unfortunately, publication of Savage's diary was cut short with the 1863 entries.

According to the county historian, the last flight of pigeons in Moniteau County in 1868 was greeted in the usual manner (Ford, 1936: 76). "They settled in the trees and shrubbery about the Catholic church. Some of the boys went out and got a few sackfuls. They left in the morning and never returned."

1870. In 1872, large flocks of pigeons were observed in Franklin County by Eimbeck (Widmann, 1907: 84), and from many reports it becomes obvious that the decade of the 1870's was a time of sporadic abundance of Passenger Pigeons.

John A. Bryant told Harris (1919: 258) that pigeons were present in the Kansas City region in 1873 and 1874: "'Killed fifteen at one shot in September, 1873.'" I find no more reports for 1873, but in the spring of 1874, Scott (1879: 147) noted the birds at Warrensburg, Johnson County: "A flock of seven seen on April 6." Then, in the autumn of 1874, a spectacular colonial roost began in southwestern Missouri.

A Springfield paper reported on 29 October (Anon., 1874a): "Twenty-five hundred pigeons were killed one night near Mt. Vernon," and on 5 November the same paper carried the report (Anon., 1874b): "Wild pigeons are so plentiful in Lawrence county that they sold for ten cents per dozen."

Charles Boutcher, a Pennsylvania sportsman, arrived in Springfield in December. He described (Boutcher, 1875: 7) a large pigeon roost that had been located near there:

. . . we regretted that an unusual and severe snow storm for this latitude broke up and dispersed this roost just about a week before our arrival. . . . We saw a portion of the camping grounds of these birds, and had descriptions of them. . . . It covered a space of about thirty square miles of closely wooded large timber and scrub oak (ten miles by three miles). . . . it would be impossible to compute their numbers. . . . Tons upon tons of them were nightly killed, and the shipments and local supplies were so great that they were a glut and a drug . . . and could be . . . bought in quite distant markets for 5 cents a dozen or less. . . . They were packed so densely that the strong oak limbs and saplings were snapped and crushed like pipe stems. The part of the "roosting ground" that we saw looked as if it might have been the scene of a battle with grape and canister. . . . [At the roost] throughout the day scarcely a bird was to be seen. Again at night and until midnight they would pour into their "roosts."

A great pigeon roost in 1874, apparently the one described by Boutcher and referred to by the Springfield newspaper, has been mentioned in the history of the Ozark region (Haswell, 1917: 116, 234). It was said to have included "the whole southwestern country." One of the big roosts was in the valley of Wilson Creek, west of Springfield; another was in a thickly settled community near Mt. Vernon.

There are no reports of pigeons in 1875, and none that I have found for early 1876. However, at Jefferson City, 29 September 1876 (H.C.M., 1876), a man wrote that "only a few wild pigeons have made their appearance." It is unfortunate that more dispatches of this nature were not published, for we might then know more about the genesis of a great pigeon roost in central Missouri in the autumn of that year.

"Rod and Gun" (Anon., 1876) on 18 November 1876, carried a dispatch said to have originated in the "Southland (Mo.) Rustic" (Stoutland, Camden County, was certainly the place meant, but no one has been able to identify the publication). A pigeon roost was described.

Pigeons have come into this part of the country by the millions. Of evenings the sky is darkened with them. They have made Dobson's [Dodson's?—see 1877] farm their headquarters, and at nights the trees and underbrush are loaded with multitudes. A little before sundown large armies of pigeons are seen coming from different points of the compass, but each army passes onward. . . . After a while they return and settle on the trees around the roost, not many of them nearer than a mile of the place. They make sudden flights from these trees, and the sound of their wings is like that of a great storm. . . . After dark they fly toward the roost and for a long time they fly to and fro, and have the appearance of bees swarming. . . . The pigeons keep up a constant chattering, which can be heard for miles away. . . . sleep . . . is out of the question with pigeons. They are disturbed by themselves . . . and the incessant discharging of firearms among them causes them to change their location almost constantly. This roost is visited every night by crowds of men, some with guns others with poles. . . . But no one can ever imagine what a pigeon roost is, or how much noise they make, until one is seen and heard. There is an abundance of mast here now. . . . One curious circumstance is that in the neighborhood of this pigeon roost we never see a pigeon from the time they leave of mornings until they return of evenings. . . . but somewhere they are all feasting abundantly, for they are all fat.

It was said (Anon., 1877) that over 100,000 pounds of pigeons were shipped from Stoutland in 1876.

Passenger Pigeons roosted in large numbers at Stoutland again in the autumn of 1877 (Anon., 1877):

A pigeon-roost is a big thing, and they have a big pigeon-roost on the Auglaize river, near Dodson's camp-ground, Camden county, Missouri. It is an annual roost, and disturbs the quiet of the people of the section. . . . There is a frightful confusion of noises. . . . The crashing of limbs—the roaring of multitudinous

pigeons, and the cracking of shot-guns sweeping the birds down [make it difficult to sleep]. . . . Besides this, there is a darkening of the air by the birds in their flight, which makes continual cloudy weather. . . . The pigeon has become a leading article of commerce . . . and the pigeon yield this year promises to be as good [as last year]. . . . everything else stops in the pigeon-roosting season except the newspaper.

The pigeon roost was a remunerative kind of nuisance!

In a report obviously unrelated to the Stoutland roost, a Chicago game dealer claimed (Bond, 1877) that there were two major nesting groups of pigeons in 1877: one in Ripley County, Missouri, and one in Benton County, Arkansas. If any reliance at all is to be placed on his statement, current beliefs concerning nesting of the Passenger Pigeon in Missouri will have to be somewhat revised. I have not discovered any corroborating evidence for 1877, except for another bald statement (Mann, 1880-81) that pigeons nested in Ripley County in 1877, which Schorger (*in litt.*, 1956) has labeled "doubtful." My guess is that some people, through ignorance or intent, did not always distinguish between roosts and nestings of pigeons.

In one of the periodic efforts by sporting magazines to chart the flights of pigeons, the editor of "Forest and Stream" wrote on 14 February 1878 (Anon., 1878b): "Correspondents will oblige us by keeping us informed of the whereabouts of wild pigeons. The birds were in southwestern Missouri at latest advices." From Audrain County came the information (Anon., 1878c): "Mexico, March 2. Pigeons here for two weeks past; are now flying northeast." I have no more information on the spring season in 1878, except for reports (Anon., 1878a) of an extensive roosting in Van Buren County, Iowa, near northeastern Missouri. There, a letter published for the week of 30 March indicated that "countless millions of pigeons have been covering about three thousand acres of jack-oak timber" for at least a two-week period. Thousands had been killed before the roost began to move.

In 1879, another large movement of pigeons was in progress, this time in the southern part of the state. The St. Louis "Republican" (Anon., 1879b) for 21 March reported:

The woods in Shannon, Oregon and Howell counties are full of pigeons, which are being killed by the thousands for shipment to eastern markets. Piedmont [in Wayne County, Missouri], on the Arkansas division of the Iron Mountain railroad, is the shipping point, and from there are shipped every day from seven hundred to one thousand dozen of pigeons, bringing into the county from six to eight hundred dollars, net cash per diem. The birds are sent to Boston and New York, where they sell at \$1.30 and \$1.60 per dozen. The roosts of the pigeons are from sixty to eighty miles from Piedmont. . . . The pigeons are continually moving toward the north, but their progress does not exceed eight, or, at the

utmost, twelve miles per day. . . . The hunters watch their game settle down, and then range through the woods . . . and when a body of pigeons settled on the limbs of a pine or oak is outlined . . . a half dozen men fire at a signal. . . . In the morning all hands are set to work to pick up the game.

Doubtless referring to the 1879 pigeon roost near Piedmont, E. T. Martin, a Chicago live pigeon dealer, told to Chicago "Field" (Anon., 1879a) about 22 March that he had located "a large nesting of pigeons." The congregation of pigeons was about 120 miles from St. Louis, and "over fifty miles from any railroad, and it seems impossible to get them to any market [in a living state, he meant]. The nearest railroad station is said to be Piedmont, Mo. In as much as feed is very abundant there and is scarce in Wisconsin and Michigan, it seems likely that the birds will remain there for several hatchings, and hence there will be few, if any, for the many tournaments advertised for May." Since Schorger (1955: 125) admonishes that "Martin is not to be believed on details," one may suppose that Martin was engaging in a little propaganda to keep high the price of live pigeons that were used in the then-popular pigeon-shooting tournaments. In this case, however, pessimism was justified. On 10 May, for instance, the editor of "Field" (Anon., 1879d) warned:

We are afraid the tournaments are going to have much trouble to get birds. . . . An inquiry . . . reveals the fact that wild birds are not to be had. The only nesting place known of is in Missouri, and that is so far from a railroad as to render it impossible almost to get the birds . . . at a price at which associations can afford to buy them for their tournaments.

However, on the same page of the "Field" there is an editorial note (Anon., 1879c): "The St. Louis tournament.—The Missouri State Sportsmen's Association tournament have secured and have in coops all the birds they will require." No information on the origin of the latter birds is given.

1880. The story of the Passenger Pigeon in the 1880's reflects the erratic qualities of the species itself. Even though some observers saw their last pigeons during that period, the bird still appeared in considerable numbers in a few sections. It was harried to the last by market shooters, who killed for food, and by netters, who took for the sport of trap shooting. The use of live pigeons in trap-shooting tournaments was almost over by about 1880, however, due mostly to the uncertain supply of pigeons (Schorger, 1955: 164–165). In 1885, St. Louis and Indianapolis trap shooters were "engaged in a laudable endeavor to prove the adaptation of the English sparrow to trap-shooting," thereby solving simultaneously the sparrow pest problem and pigeon shortage (Anon., 1885c). (Before glass balls and clay

"pigeons" finally replaced live birds, sparrows, Purple Martins, and bats were suggested—bats were used rather successfully, and for some time, in the sporting weeklies of the day, scores were regularly reported upon for bats, particularly in Louisiana and California.)

In the realm of folklore, at least, the bird still flourished. One rather wild report (G.S.B., 1880) divided the nesting pigeons into three groups. One of those flocks was found in Missouri, drifting "about from season to season following the crop of nuts and rarely going beyond the boundaries of their own States."

On 29 September 1880, J. D. Kastendieck killed his last specimen of the Passenger Pigeon, at Billings, Christian County (Widmann, 1907: 84).

For 1881, one can only accept the word of the editor of Chicago "Field" (Anon., 1881a): "As is well known, this is what is termed the 'off year' for wild pigeons." In January it was said (Anon., 1881b) that "immense flights of wild pigeons have established nestings in the dense timber lands bordering on Southwestern Missouri" (*i.e.*, in Indian Territory). Birds were shot in great numbers, but the point was 75 miles from a railroad, and netted birds could not be supplied with food (Anon., 1881a). W. W. Judy (*ibid.*) in late March advised associations to put off tournaments until later in the year in the hope that the pigeons would move into Missouri for another nesting. These dispatches are only samples of the pigeon market literature: it would be difficult to learn how much of the mass of fabrications, self-deception, and slanted information the marketeers themselves believed. At any rate, with their bland announcements about "nestings," first, second, or even more nestings, they went about their business of hounding the pigeons into extinction (see Schorger, 1955; also see Chicago "Field," 15: 168, 232, 1881, for further information on the Atoka, Indian Territory, "nesting"). At least one Missouri sportsman (Occident, 1881) endorsed the stand of "Forest and Stream" against the shooting of live pigeons at tournaments.

In a long letter written in November 1881, William King (1881) painted a somewhat glowing picture of game in "the mountains" of Washington and Crawford counties. It appears, however, that the information was based on considerable experience in the region. After including Passenger Pigeons among the large quantities of game animals found there, he wrote:

Wild pigeons are mostly birds of passage, although they have their pigeon-roosts sometimes in the mountains, where thousands can be slaughtered, and many are killed by clubs alone. The wild pigeons annually appear in the fall about the beginning of October and continue through the winter and spring; they fly in

large flocks over and through all parts of the mountains, darting through the air with immense velocity. Frequently from twenty to thirty may be brought down by the double shot; they are also caught in nets in large numbers.

Without stating the month, George (1911) wrote of seeing 10 or 12 pigeons near Gunn City, Cass County, about 1882. He had seen since his arrival there in 1865 "a few small flocks and killed two or three pigeons."

Widmann (1907: 84) saw several large flocks going north at St. Louis on 5 and 6 February 1882. At Keokuk, Iowa, near the north-eastern corner of Missouri, on 6 February, a man wrote (Scott, 1882): "A large flock of wild pigeons passed over Sugar Creek yesterday; two were killed, a male and a female." From Thomasville, Oregon County, 7 February, word was (Sassafras, 1882): "Wild pigeons are roosting in large numbers within four miles of this place, and every 'shooting iron' in the place is kept hot in their destruction." W. W. Judy, famous pigeon dealer, wrote (Judy, 1882a) from St. Louis, 12 February: "Wild pigeons in considerable numbers are feeding opposite this city in the American Bottom [Illinois]. Quite a quantity have already been shot." According to a dispatch to American "Field" in March (Anon., 1882), "a very large roost" was at Brunswick, Chariton County.

A little later in 1882, Judy (1882b) reported on the spring's success in trapping: "This spring they made their appearance in southwest Missouri early in February, and shortly after large roosts were formed in Lincoln and Chariton counties in north Missouri. . . ." There had been no success with netting, and the pigeons were said to have then gone on to Michigan and Pennsylvania. There is little information on the pigeon for the rest of 1882. Cooke's observer at Vesta, southeastern Nebraska, reported (Cooke, 1882) pigeons "going north in large flocks 4/21-25; two large flocks on 5/5."

On 21 April 1883, "Field" announced from Chicago (Anon., 1883b): "Messrs. Bond & Ellsworth inform us they have received a telegram from W. W. Judy, of St. Louis, stating that he is at Augusta, Mo., and there is a large nesting of wild pigeons near there." Bond and Ellsworth were mistaken in identifying the place as Augusta, St. Charles County, as the town Judy referred to was Thayer, Oregon County, which was given the name "Augusta" for a short time (Pottenger, 1945). They later (Bond and Ellsworth, 1883) amended their report:

The nesting is said to be about forty miles from Augusta, Oregon county, Mo., on the south line of the state. We do not hear of any birds being caught; none coming here, or going to New York. . . . The birds may come to Michigan by the middle of May, as by that time they will have hatched out their young in Missouri.

Judy himself (1883) reported on 12 May:

I returned to-day from the wild pigeon roost, located eight miles south of Augusta, Oregon county, Mo., where there is a small body of birds nesting. There are about forty netters there, but thus far the catch has been very light, as the pot-hunters are shooting them out, and will not allow the main body to nest. I am in hopes the birds will be driven north. . . . Unless there is a change soon . . . clubs will have to look elsewhere for birds.

The distances given by Bond and Ellsworth and Judy are in contradiction; the figures were probably round numbers, and they may have been garbled. If either eight or 40 miles are taken as a literal distance *due south* from Augusta (*i.e.*, Thayer), the alleged nesting took place in Arkansas. Both reports, however, specify Missouri, and that birds were present in that general area in the spring of 1883 is confirmed by an account from Ripley County, some 20 to 30 miles northeast of Thayer. The Doniphan "Prospect-News" for 30 March (Anon., 1956) noted:

There have been more than 10,000 dozen wild pigeons shipped to St. Louis from Piedmont with[in] the last two months and more are constantly being shipped. The "roost" where most of these pigeons are killed is in the northwest corner of Ripley, close to the Oregon and Carter County lines.

It is significant that the local dispatch refers to this pigeon flock as "roosting"; but it ought to be noted that the communications of Judy calling it a "nesting" are of somewhat later date.

This ends the discussion of the pigeon for the spring of 1883, unless there is some connection with a report of M.R.B. (1883), who reported from Chicago on 12 June: "It has been reported lately that the pigeon nesting in Missouri has been robbed of all the young. One man is said to have 60,000 young birds in his possession, and several others 10,000 each" (the implication being that the men raised the young birds until they were old enough to be used in trap shooting). In commenting on this event in 1884 (M.R.B., 1884a; 1884b), the same person related that 40,000 (of 60,000) of the birds had died before their holder could dispose of them. He told of another man who lost all but 3,300 out of 20,000 birds secured in Missouri in 1883. Specific nesting dates and localities were not given.

In the autumn of 1883, pigeons were common for the last time at Keokuk, Iowa (Widmann, 1907: 84). The winter that followed must have been very nearly the last time that the wild pigeon was present in really impressive numbers in Missouri. For that occurrence, a Tennessee report quoted by a New York magazine must be relied upon. That undated dispatch, carried in "Forest and Stream" (Anon., 1884a)

in early January 1884 (credited to the Memphis, Tennessee, "Avalanche"), recorded "a pigeon massacre at a Missouri roost."

Hearing that game was abundant on the line of the Kansas City Railroad . . . we formed a party to go out. . . . Near Augusta, Mo., . . . the roost of pigeons was represented to us to be "perfectly enormous." . . . Early Thursday morning . . . with four days' rations . . . we made the start over the hills. . . . On the way we shot a few quail. . . . [We encamped the first evening and next day] before the light of morning came our tent and all hands were in the wagon, and as the sun rose, the birds began to fly over us, and all day at short intervals we were shooting right and left in the roost. The trees were literally crowded with them. . . . Their roost occupies a space of about five miles long and three miles wide, and when the pigeons come in at night and leave in the morning they actually darken the earth around. At 10 o'clock the second night we had one wagon box full and left for a camping ground. En route we met Joe Bowlinghouse, an experienced hunter, whose luck that day brought him three fine deer. . . . At this juncture another crowd of hunters, with two teams filled with pigeons, came upon us. . . . At daybreak next day we all started for Augusta, and got there a little after dark. When our pigeons were counted (three wagons), we had 5,415, and in our own we had 1800.

The reference here was probably again to Augusta (*i.e.*, Thayer), Oregon County, as the correspondence originated in a Memphis paper, and since "Augusta" was on the Memphis-Springfield segment of the Kansas City railroad, which was completed about 1884 (Thomas, 1917: 8). I also suspect that one would have been more likely to kill three deer in one day in Oregon than in St. Charles County (to which Schorger (1955: 218) referred the pigeon roost).

In 1884, Mrs. Musick (Cooke, 1888: 108) saw pigeons at Mt. Carmel, Audrain County, from 9 to 21 September.

M.C. (1886) on 24 February 1885, "Saw five Passenger Pigeons" at Wayland, Clark County. At Mt. Carmel, in 1885, Mrs. Musick (Cooke, 1888: 108) saw pigeons 18 April and 27 (20 seen), 28 (50 seen), and 30 September. Widmann (1907: 85) saw them, his last record at St. Louis, on 19 September.

A total of 4,929 wild pigeons and 8,129 turtle doves were killed in Missouri for the year ending 1 March 1886 (West, 1886). There is no way to evaluate these figures; they come from a long list of game animals, and were presumably drawn from some source concerned with the St. Louis game market.

At this late date, one of the few public moves to provide legal protection for Passenger Pigeons was proposed by a convention of sportsmen and game market operators at St. Louis in 1885. They suggested (Anon., 1885b) that in states east of the Rocky Mountains pigeons be hunted only from October to March inclusive.

From Alexandria, Clark County, Jasper Blines (1888) wrote in November 1888 that during the year he had seen "but few passenger pigeons. They were in former years very numerous here, and could be seen . . . every spring and autumn." Since food was still abundant, he supposed that their disappearance might be due to locomotive whistles, steamers, and the noise of cities.

1890. In the 1890's, reports of pigeons in Missouri became more scattered. One man writing from Macon County said (Truitt, 1891) there was a roost on Blackwater River, Saline County, in 1890; pigeons were occasionally seen in the Macon County area.

The editor of "Shooting and Fishing" wrote in February 1891 (Anon., 1891), that despite reports of the pigeon's extinction, a hundred dozen or more choice "'dodos'" from Pennsylvania and Missouri might be seen in the Boston markets. Wild pigeons were not at all near extinction, he maintained, and a change in nesting habits could yet be expected to save the species. The shooting interests did not easily admit defeat!

Emerson Hough (1892) was told in 1892 that wild pigeons visited southeastern Missouri regularly every other year. The roost of the birds at that time was in Indian Territory, where netting was no longer profitable, "but the bird is not extinct." Blines (1892) did not see a single pigeon in Clark County during 1892.

No pigeons were placed on sale in St. Louis markets in 1894 and 1895; and those sold in 1893 had come from Arkansas (Deane, 1895).

Currier saw 10 pigeons 15 April 1894, at Keokuk, Iowa—the first he had seen since 1888 (Widmann, 1907: 85). In September 1896, the last specimens of the Passenger Pigeon from Iowa were taken in Lee County on the northeastern border of Missouri (the last Iowa sight record, however (DuMont, 1933: 80, 81), was in Kossuth County, another county bordering Missouri, in 1903).

Early in 1896, Goss (1896) wrote from Arcadia, Iron County, 14 March that a few days before he "saw in the woods near here a flock of nine." (His statement that he had not seen any for about 10 years does not apply to Missouri, as he was living in Iowa as late as 1895; see "Iowa Ornithologist," 1 (4): 76–79, 1895.)

On 17 December 1896 (Deane, 1898: 185), Charles U. Holden, Jr., shot two pigeons from a flock of about 50, and sent them to Ruthven Deane (Deane, 1897: 317). The pigeons had been killed at Attie, Oregon County. (Attie was once a hamlet one and one-half miles southwest of Rover (Pottenger, 1945), so the place was not Alton, "Altie," or "Attic," as various ornithologists have mistakenly sug-

gested.) Residents of Attie reported to Holden that they had not seen any pigeons for several years previous to that time.

Deane's was the last verified record of the Passenger Pigeon in Missouri, but there is an interesting sidelight to the report. In a column published 26 December 1896, Emerson Hough (1896) related that, while hunting with friends on "a quail trip in Missouri and Arkansas," William Knight had seen "a large flock of real wild pigeons, and he had killed two of them," bringing them home for mounting. Despite differences in names of the shooters and slight variations in circumstances, one wonders if Deane and Hough did not refer to the same hunting incident.

The decade ended, so far as records go, with the report (Widmann, 1907: 85) that a flock of 75 to 100 pigeons was seen in Johnson County, southeastern Nebraska, 17 August 1897.

1900. Otto Widmann reported to Forbush (1913: 100) that Miller, a St. Louis pigeon marketman, received 12 dozen pigeons from Rogers, Benton County, Arkansas, in 1902, and a single bird from "Black River" in 1906. Black River probably refers to southeastern Missouri or northern Arkansas. In 1902, Dr. Eimbeck saw pigeons (number not stated) at New Haven, Franklin County, 26 September (Widmann, 1907: 85). Eimbeck's was apparently the last sight record of the Passenger Pigeon in Missouri; while it is open to question, as sight records always are, Eimbeck apparently stood high in the respect of Widmann.

SUMMARY

Really large flocks of Passenger Pigeons persisted in Missouri longer than did the flocks of parakeets (*Conuropsis carolinensis*), another eminently social bird that early travelers found common in Missouri. While the parakeet's passing remains a mystery (McKinley, MS), there is less uncertainty as to why the pigeon disappeared. Some of the reasons are plain enough, despite the vested disclaimers of the pigeon trade faced with a declining resource that it had treated, and meant to continue to treat, as inexhaustible. Railroads, of course, speeded up the exploitation in Missouri, and their effects were felt at a crucial time in the bird's struggle for survival. Barrels of dead birds were carried swiftly by train to distant cities from small towns formerly cut off from eastern markets. Armies of pigeon hunters, made dangerously mobile by the new transport, hounded the flocks of pigeons into the most remote parts of the state, wherever they sought refuge. Such a pattern of decimating factors becomes apparent, even from a study of limited

data from Missouri. When these factors are magnified to a nationwide scale and linked with the bird's fundamental need to nest, travel, and feed in large flocks, there is not much mystery left.

Pigeons were often common in Missouri. They may have been somewhat sporadic in their occurrences, but there are many reports of them in fall and spring, and some for winter and summer. Records from the state or bordering counties of neighboring states where dates or seasons are indicated may be summarized roughly as follows:

January	0	September	13
February	10	October	7
March	11	November	3
April	13	December	4
May	6	Spring	7
June	0	Summer	0
July	3	Autumn	7
August	2	Winter	6

The question of relative numbers present in various years and in different seasons can never be very satisfactorily settled. When Missouri newspapers are thoroughly studied and greater use can be made of manuscript material, a clearer picture may emerge. It will probably be found that pigeons did not commonly nest in the state. However, at least one unrecorded nesting, near Dykes, Texas County, perhaps in the 1860's, is among traditions of my family. That record, together with the smattering of references cited here, ought to be further investigated.

Newspaper accounts tell of extreme abundance at times up to the 1870's and 1880's. Then, reports become hazier and more isolated, until the kill records of 1896 in Ripley County and a few sight records up to 1902 end the story of the Passenger Pigeon in Missouri.

APPENDIX

Some indefinite references to the Passenger Pigeon in Missouri have been placed here. General references are arranged chronologically; the rest are listed by county.

<i>County</i>	<i>Reference, Date, and Other Comments</i>
General	Stoddard, 1812: 231. No date or specific locality.
	Schoolcraft, 1819: 37. General terms only, 1818-1819.
	Flint, 1832 (1): 291. Numerous in some seasons; no time or locality given.
	Wetmore, 1837: 29. No date or locality given.

- Douglass, 1912 (1): 50. Southeast Missouri; present in season in early days.
- Hayden, 1862: 172. Pigeons said to be quite abundant on the lower Missouri River, 1855-57; no locations cited, but Hayden collected along northwestern Missouri.
- Mershon, 1907: 139. See Van Cleef, below.
- Anon., 1874c. Echoes reference Anon., 1874b, without citing county.
- Mershon, 1907: 107. Pigeons wintered "in southern Missouri and the Indian Nation" in 1874; they were shot at night and sold in St. Louis.
- Van Cleef, 1899. Another attempt to attribute periodic, migratory nestings to pigeons. He says there was a nesting near Poughkeepsie, New York, in the early seventies; pigeons nested first in Missouri, then in Michigan, and finally in the Catskills.
- Schaff, 1905: 109. A flock of 75 to 100 birds was seen eating "the little acorns of the water oak" on Black River, Southeast Missouri; probably winter of 1877-1878.
- Anon., 1935. No place given (Jefferson City?); a spectacular flight in late winter, 1882.
- Anon., 1913. "Main body" of pigeons reported on 9 May 1886, to be in Missouri.
- Barry Anon., 1888: 564. Still present in 1880's (?).
- Cass Glenn, 1917: 87. Author could remember seasonal visits, when flocks, "fully a mile wide and many miles long flew across the country, obscuring the sunlight."
- Chariton Anon., 1883a: 390. Still present in the 1880's (?).
- Howard Widmann, 1907: 84. Pigeons were seen last at Fayette in 1878; information given in 1885.
- Anon., 1883a: 390. Still present in 1880's (?).
- Jackson Latrobe, 1835 (1): 105. Late September 1832; Latrobe went on "a morning's pigeon shooting," but left no indication if any were seen or killed.
- Laclede Gleason, 1949: 2. Once present; no date given.
- Lafayette Anon., 1881c: 241. Still present in 1880's (?).
- Lawrence Neff, 1923: 179. Neff's father (born *ca.* 1869) once hunted them; they were abundant.
- Anon., 1888: 208. Still roosted there in the 1880's (?).
- Newton Anon., 1888: 208. Still roosted there in the 1880's (?).
- St. Charles Anon., 1885a: 145. Said to be still present in the 1880's.
- Texas Anon., 1889: 429. Still present in the 1880's (?).

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