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**AMERICAN KESTRELS ON WEST 25TH STREET - 2008**

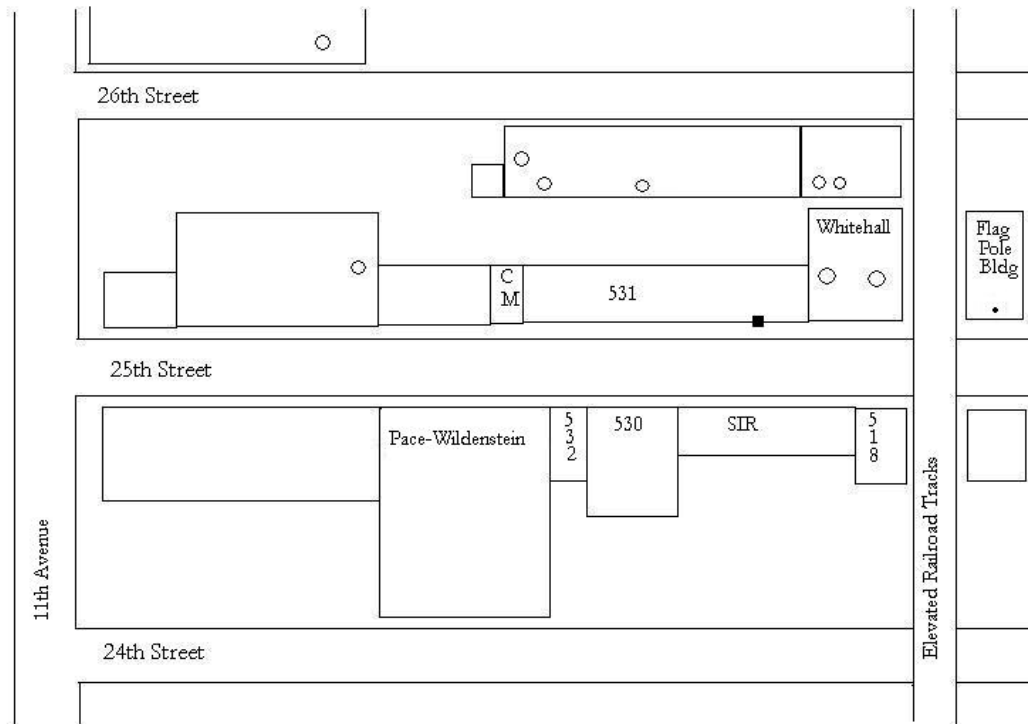
Chuck McAlexander

As 2008 began Male1 was once again the lord and master of the 25th Street nest area (McAlexander 2005, 2006, 2007, 2009). Within my view he frequented three favorite high perches and used the nest tube as his own private, heated winter roost. It was his shelter from nasty weather, as well. The abundance of House Sparrows, European Starlings and rats meant he never lacked food. Water couldn't have been much of a problem, either, given the tendency of the many rooftop water tanks to leak. On balance, this location had done well for Male1 since 2004 (see page 2). Male2 likely went elsewhere for the winter. I did not see him after his parental duties of the previous year finished. The female probably did stay in New York, but not in Male1's domain. I saw her only infrequently. Any connection between the three seems to be discarded with last summer's plumage.

That changed when the female arrived on January 8. She perched on Male1's favorite perches to re-habituate him to her presence. By January 12, a pair once again, both birds made an inspection of the nest tube. They entered and exited the cavity several times, as if they were incredulous of having found such a perfect nest site and were totally unaware of the many hours each had spent in exactly that place. After that, both birds were once again comfortable in the territory and undisturbed by each other's presence.

If there were courtship flights, I missed them, but on February 14 the female was perched on the nest tube. Male1 arrived with a fresh kill, likely a small rat that early in the season, and passed it to her. She took the offering to another perch. After about twenty seconds, he followed. It is likely they copulated then, but I didn't see it. I did, however, catch them in the act later in the day on top of the flagpole. It seems that cementing a pair bond with food and sex on Valentine's Day is behavior which is enjoyed by more than one species.

Early on the snowy morning of February 23 Male1 was on his usual perch atop the nest tube. His habit was to sit there until the mood to hunt, or just simple desire, would impel him to take to the air. Sometimes he would go back into the tube for a while if he wasn't quite ready for his day to begin, which he did on that morning. At about 9:30 Male2 (larger and brighter than Male1) announced his presence with a challenge. He came screaming in from the east at speed, did a touch and go on the nest tube to inform Male1 of his seriousness, then flew up to the flagpole at the east end of the block. Less than fifteen seconds later Male1 dropped out of the nest and flew east. Whether they met in the sky to discuss current affairs or not, twelve minutes later Male2 was sitting on the nest tube as though he owned it – so much for Camelot.



Legend: ■ = Nest tube; ○ = water tower; 532 = location of my shop; CM = Chelsea Marlborough; SIR = Studio Instrument Rentals

The next day the two males were still discussing the issue. Male2 still had possession of the nest, but Male1 perched within view and screamed his displeasure. This vocalization is nothing like the textbook *klee, klee, klee* call or the simple chip note a male uses when approaching a nest occupied by his mate. It is a pure and simple throaty scream meant to challenge its target to a fight.

The fight didn't happen. The next morning Male1 was perched on the nest tube. At 8:15 both males were perched together on one of the favorite high perches. An "arrangement" had once again been achieved. I found both males on various perches throughout the day, with Male2 back on the nest about 4 PM.

From this point forward, Male1 kept to the background. Male2 and the female dominated the area and especially the nest site. She likely began laying eggs about this time, too. This was indicated by the constant occupancy of the nest by either the female or Male2. If she left the cavity, he came shortly thereafter and went inside. Maintaining egg temperature is one possible explanation for this behavior.

March 6 brought an unwelcome environmental change. Sandblasting of the iron work on the elevated railway soon to become Highline Park reached 25th Street. The steady roar of the huge air compressors powering the blasting equipment was augmented by the high, piercing whine of the vacuum used to take up the blasting media and paint chips. Air monitoring units, powered by separate lawnmower sized engines added their thrum to the din as well. Of course, some silica dust, rust and powdered paint with a possible lead component escaped the enclosure, so the air quality on the street was noticeably compromised. It was an acoustic nightmare with possible health risks for birds and humans alike.

As intolerable as the noise and dirt were to me, the kestrels seemed unbothered. Something more insidious was threatening them. Over the previous six weeks the third and fourth floors of their building had been emptied for renovation. Part of the work would involve replacing all the windows, including the one with the kestrel's nest tube. In discussions with Larry, the nest building's super, I learned of his efforts and possible success at saving the nest. It was to be dismantled, possibly cleaned and painted, then returned to its

prior position. The 800 pound gorilla in this plan was whether the gentrification would occur before or after the first clutch of eggs became fledglings. I was prepared to instigate legal action if necessary, but only provided information at that time. Larry was applying pressure and I didn't see any advantage to making enemies of potential friends by threatening them.

Male1 made another appearance on March 13. About 7 AM Male2 was perched on the nest tube. Male1 emerged from the cavity and joined him for a short sit before launching into his day. Neither male seemed the slightest bit disturbed by the presence of the other. I was. Nothing I have read or heard allows for such closeness between two male predators during the breeding season. The next morning the same thing happened again.

Over the next two weeks defense of the nest and its environs became more intense. Along with Male2's magical instant arrival at the nest whenever the female dropped out to hunt, feed or preen, the street's pigeons were personally informed of the new minimum distance they must maintain between themselves and the nest. Male2 became quite irritable and much less tolerant of the birds. He evicted them with gusto.

By the last week of March my sightings of any kestrel in the area diminished. The most I could hope for was a look at Male2 or the female perched on the tube in the morning. After a month of courtship and nesting activity, the contrast was enough to lead me to believe the noise, pollution, and human disturbance had finally caused the birds to abandon the nest and its eggs. April 1 showed me to be the April fool of their joke. About twenty minutes before 7 AM Male2 delivered a fresh kill to the nest. The kestrels' grace and the synchrony of their movements were inspiring. He approached the nest from the east. Just as he arrived, she popped up, took the meal from his passing talon, then dropped back into the tube. She never perched on the tube and he didn't so much as touch it in passing. In this equation speed and coordination is the same as stealth. Even an eye blink

would be enough to make you miss this transfer of food. There wasn't even a deflection of his trajectory to mark the moment when the prey he carried disappeared.

Five days later the mood was more relaxed. I saw Male2 eating part of the prey he delivered to the nest in a much less furtive manner. My guess is the hatching period began April 1 and ended April 6, but I have no explanation why this particular event requires more secrecy than after all the eggs are hatched. Perhaps there is an odor which is attractive to predators that dissipates once the new hatchlings have dried.

During the same week, the Grim Reaper took a step back. On April 3 Larry from Whitehall questioned me about the incubation and fledging period of the kestrels. I told him the eggs take about a month to hatch and the chicks another month to leave the nest. I couldn't have felt happier when he told me the new windows were going to be installed soon, but he thought he could delay work on the nest window for the two months. I didn't tell him the first month was already finished.

The reprieve did not, however, mean there would be no disturbance. On April 9 the windows near the nest were open and the workers on that floor were not only noisy, they were leaning out, waving their arms and cat-calling to attractive women on the sidewalks below. I didn't see a kestrel all day. Male1 put in a brief appearance on the 8th. He perched on the rung of a smokestack ladder and consumed the remains of a bright yellow bird. There wasn't enough left to determine anything about the meal other than the color of its plumage. When he finished eating, he wiped his bill and talons on the rung, then sat in the sun for a while before leaving.

Ordinarily, a kestrel can dispatch and pluck a small bird in two minutes, more or less. On April 17 Male2 seemed to be trying to set a new speed record. Instead of clumps of feathers wafting downwind, there was a steady stream coming from a medium level perch. It took him less than a minute to prepare the kill, which he then served to the female. Things didn't go quite so well on the

24th. On the same perch as before, Male2 had to deliver five bites to the back of the neck to dispatch his prey. With each bite the poor bird jerked and twitched. Ultimately, he took over a minute to kill and another three minutes to pluck this smaller than usual bird. What species was this unfortunate victim? Brown Creeper. One of my favorites!

To augment the day's bi-polar essence, Larry informed me that a kestrel caught, killed, dismembered and fed a pigeon to the chicks. Pigeons are usually considered too large for a kestrel to manage, but he claimed certainty. None of the literature mentions any prey other than small birds, small mammals, small lizards and big bugs. He also mentioned again the building's management intended to keep the nest tube in place. My notes say I felt cautiously ecstatic.

Three days later, on April 27, the female did something which, while not incontrovertible proof, at least adds credence to Larry's pigeon story. She emerged from the nest, perched on top and surveyed the area. Then, she took off like a shot, powerfully muscling her way to the east. She flew close to the faces of the buildings she passed to minimize the chance she would be detected by her prey, a pigeon. Caught unawares, the pigeon shot out and down, dodging the worst damage the kestrel intended, but not all. Feathers flew and I'm sure the pigeon had a sore back for a few days, but it survived, nonetheless.

This episode demonstrates more than whether kestrels consider pigeons a prey species. It shows conscious thought, planning and an ability to adapt to atypical circumstances. Since it is impossible to approach and attack prey from above and behind, a kestrel's usual tactic, if the prey is sitting on a window ledge facing outward, the kestrel opted for a side assault incorporating stealth to maximize surprise. This is in stark contrast to the way a kestrel chases a nuisance bird from the nest area. In that confrontation the kestrel signals its intention to attack from a reasonable distance and then dives at the target with just enough speed to miss actual contact. The desired result, eviction of the nuisance bird, is

achieved, but there is little or no risk of damage to the kestrel. Male2 demonstrated the eviction procedure later the same day. I am convinced the female was hunting pigeon, but once again, can't claim to have witnessed the act to completion. The bird escaped.

Two days later a kestrel I could not identify demonstrated yet another adaptation to its urban environment. The winds were from the east and fairly constant. The kestrel in question rode the breeze from a mid-level perch directly at the 20-story Chelsea Marlborough Arts Condominium building. It seemed as though the bird, gaining speed with its approach to the flat face of the building, was going to slam head first at about the sixth or seventh floor. But, the kestrel knew more than I did. It rode the same breeze, now accelerated and turned 90 degrees straight up into the sky. The kestrel gained about ten floors of altitude in less than a second on the "air elevator" neither of us could see, but the little master of the sky knew was there. With complete nonchalance the bird flew east at altitude and with easy speed.

During all of late-April and early-May, Male2 was very busy ferrying food to the nest and sustaining his vigil guarding the territory from high perches. Consequently, Male1 was able to make a few appearances that went unnoticed. The only copulations I observed were between the female and Male2, but that didn't rule out Male1 adding to the gene pool on occasion, as he apparently did in 2007.

By the beginning of the second week of May the food strategy changed. Male2 began teasing the chicks in the nest. Before actually delivering their food, he would display the prey and call from perches visible from the nest. Sometimes he would take it to the nest, show it to them, and then take it back out to a close perch. The chicks weren't deprived of food – a short while later he would return to the nest and yield the meat to them.

On May 13 Male2 arrived with a heavy load. He took it to a perch overlooking the nest where he proceeded to pluck a light-colored bird with large, pink feet. He consumed some of the unusually large prey,

then took the rest into the nest. I couldn't identify the species. It was too large and too light in color to be a Mourning Dove, although they do have pink feet. Except for some pet-shop bird I can't name, a nestling Rock Pigeon is the most likely candidate. There was an ample supply available from the underside of the Highline not half a block from the nest. Again, this is a dollar short of proof, but lends a little more credence to the pigeon as prey hypothesis.

All this extra work took its toll on Male2. On May 15 he brought prey to the nest and dropped it in the top entrance. It fell out the bottom and bounced on the sidewalk four floors below. He shot down to retrieve it, but took it elsewhere. Even though fatigue was clouding his judgment he managed to copulate with the female on the 17th. Perhaps, sitting in the rain most of the previous day recharged his batteries. Or, maybe it was a change in strategy. On the 20th, Male2 again spent half the day sitting in the rain within view of the nest. The reason for his rapt attention became clear the next day – an immature female at the front of the nest. She did not do any more than come to look, but her presence signaled the advent of fledging day.

The next morning I arrived at work about 6:30 AM and found a note from Robert from the Chelsea Marlborough. He had seen a "hawk" under a truck the previous evening. He called me about 7:20 with the same news. I grabbed a towel and hurried to meet him at the truck. We worked as a team chasing the young female kestrel until it got to a more open place on the sidewalk where I dropped the towel on it. I took the bird to the roof of my building and put a box in one corner for shelter. I checked on her every hour, or so. I didn't want to disturb the bird, but I did want to check her progress and deal with any problems that arose. The wind got stronger, but that didn't dissuade the bird from perching at the edge of the roof. With each gust, I was sure she would be blown off the precipice to the traffic below. I had no reason to worry. The young bird knew what it was doing. After all, she was a falcon. Just before 3 PM I re-

ceived another call from Robert. The kestrel was no longer on my roof. It had flown out of his field of view. He had borrowed my binoculars and, along with several people in the Marlborough, had been watching the bird through their large windows.

I went to my roof to confirm the bird's exit and to check other rooftops, nooks and crannies for its new perch – no sight of the bird, but a little later a downy female was perched on a window ledge across the street, at the level of my shop. She seemed to have a problem with her right foot. She picked it up and extended it to the front for long periods. When she stretched or flexed it, it quivered. Also, it seemed smaller than her left foot, but that could have been because her right talons weren't extended like those on her left foot.

I watched the fledgling female until about 6 PM, wondering whether there were yet more to come from the nest. I hadn't seen any other immature birds. Another bird gave me the answer to the chance of there being more kestrel fledglings. A pigeon had perched on the upper entrance to the nest tube. Had there been any more nestlings inside, this bird would have been evicted with prejudice. It became clear that the single female was the sole issue from this nesting. It was also clear the adults were no longer even slightly interested in the cavity.

From May 25 until the end of the year my sightings of kestrels in the area were few and far between. If another nest was attempted, it wasn't anywhere near the 25th Street site. Most often I saw a single, back-lit bird on a high perch. I could only identify it as far as species and probably made errors even then. Silhouettes can be a little tricky to read.

August 3 brought the only drama involving a kestrel. About 7 AM Male2 was on one of the high water tank perches. Two Chimney Swifts took turns diving at the kestrel from behind. By the time a few minutes had passed, half a dozen swifts were involved in the harassment. The halo of swifts was too much for Male2, so he left.

With the breeding activity done and building reconstruction at a fever pitch, I was

hoping the nest would undergo its gentrification soon and quickly. Male1 had used this tube for at least the previous four years and probably longer. Conversations with Larry yielded no new information about the work.

About September 23 I managed to see through the safety netting well enough to discover the tube was no longer in the window. I stared at the new window each day hoping to see it reappear. Finally, I realized that no provision for mounting the tube had been made. The new tenant, an architect, found the little sunlight the nest blocked to be worth more than the novelty of having a raptor's nest in the window.

September 26 Larry from Whitehall rang my doorbell. He had something for me, a chunk of pipe which resembled the nest tube. He said it was the one from the adjacent window and not the actual nest, but he recanted some days later. I told him I would build a nest box to mount on the roof above the old site in hope it would be an acceptable substitute and I thanked him for his diligence and concern. We were both saddened by this turn of events, but at least the kestrel's nest of so many years was available for study. I will report details of this nest in a separate article. A month later the new box was in place on the roof. Now, all we could do was wait.

November and December were uneventful. Every few days to two weeks a kestrel sat on a high perch. The most I could make of this was that a kestrel found some perch in the area useful four or five times in a month. My last log entry was 8:30 AM on December 16. I heard a couple of calls, but didn't see the bird. The kestrel year ended in a whimper.

Given the changes in the neighborhood and the loss of the nest tube, I don't expect much in the way of kestrel activity in 2009, but I'll look – and remember.

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## REVIEW: HISTORIES OF ORNITHOLOGY

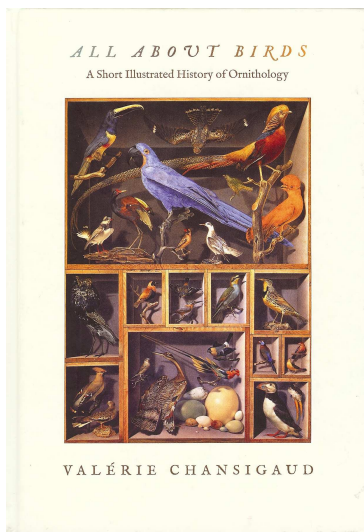
Joseph DiCostanzo

[*The Wisdom of Birds: An Illustrated History of Ornithology* by Tim Birkhead. 2008. 433 pp. Bloomsbury USA. \$45.00]

[*All About Birds: A Short Illustrated History of Ornithology* by Valérie Chansigaud 2010. 240 pp. Princeton University Press. \$29.95]

These interesting and attractive books are devoted to the history of the study of birds. The classic work by Stresemann (1975), a scholarly history aimed at a professional audience, has long been out of print. Also, as an English translation of a German book originally published in 1951 it is now six decades old. There have been more recent works, generally of a more specialized nature: Farber (1982) looks at ornithology's development as a modern science from the late-18<sup>th</sup> Century to the mid-19<sup>th</sup> Century while Walters (2003), though aimed at a more general audience than the earlier works, emphasizes classification and taxonomy. Despite its title, Bircham's (2007) book focuses on the history of British ornithology rather than the field as a whole. For American ornithology see the fine book by Barrow (1998).

Stresemann's study contains no illustrations (other than a frontispiece photo of the author) while Walters' has many pictures of scientists and a handful of birds (all in black and white). These latest two boos by Birkhead and Chansigaud, as did the works mentioned above, originated in Europe, but as their subtitles state are heavily illustrated. Beyond that these two new works take very different approaches to their subject.



Chansigaud's book was originally published in France in 2007, with an English translation in the United Kingdom in 2009 and finally this American edition. It is a relatively slender volume and follows what might be considered a more traditional approach than Birkhead. After a brief introduction, seven chapters chronologically look at ornithology, starting with "Antiquity" followed by "The

Middle Ages" and "The Renaissance", then a chapter each for four centuries from the 17<sup>th</sup> Century to the 20<sup>th</sup> Century. From Aristotle to 20<sup>th</sup> Century ornithologists, the focus is the people who have brought the study of birds from mythology to a modern science. The text is clear and well-written; however the occasional odd phrasing reminds the reader that it was not originally written in English.

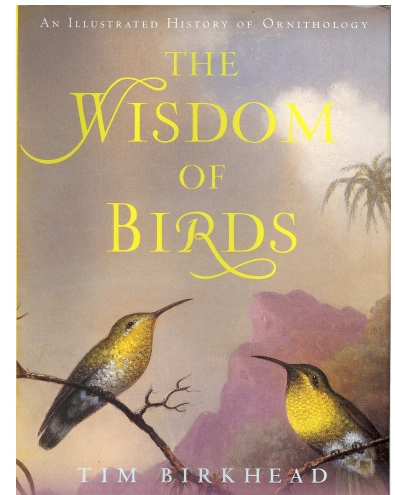
The main illustrations are nearly all of birds from illustrated works over the centuries. Except for older monotone works these are all in color. The quality of the reproductions is excellent, if a bit small. Many famous bird artists are represented including Audubon, Fuertes, Gould, Keulemans, Lear, Wilson and others; some of these are themselves discussed in the main text. There is also some lovely work by unknown Indian artists (pp. 111, 115), a legacy of the British Empire. Unfortunately, there are also a few illustrations where the artist is not credited and only the author of the work in which it was published is listed (such as pp. 150, 157, 160). For a dedicated survey of bird art, see the beautiful book by Linnaean members Pasquier and Farrand (1991) or the more recent one by Elphick (2005). Throughout Chansigaud's book there are smaller, marginal illustrations. A few are the title pages of major publications or the logos of important organizations, but most are pictures of the people discussed in the main text. The captions of the latter usually

include information about the person. I noticed one misleading caption. Under the photo of Ernst Mayr (p. 202), one of the 20<sup>th</sup> Century's top ornithologists and a long-time Society member, it states he made his career at the American Museum of Natural History. While Mayr first came to the United States to work in New York (1931-1953) and did much important work at the American Museum, he spent most of his long life and career at Harvard's Museum of Comparative Zoology (1953-2005).

Chansigaud's book concludes with a few pages on the current role of ornithology and ornithological collections, a brief bibliography, an index of people and institutions and a twenty page timeline from 340 BC to 2002.

Instead of strict chronological order, Birkhead's organizes his book around the biology of birds. In chapters devoted to different aspects of avian life history he traces the historical discovery and development of knowledge in each subject. There are chapters on embryology, development and instinct, migration, breeding cycles, territory, song, sexual dimorphism, mating systems, longevity and lifetime reproduction. Throughout, material is presented in a well-written, clear, nontechnical style accessible to a general audience. The reader will learn a lot of history, as well as avian biology.

One fascinating story concerns the Acorn Woodpecker. Acorn's are social breeders living in groups – young males from previous seasons assist their parents while females disperse to other groups. Birkhead tells the story of a researcher following a young female as she moved to another group only to be driven off by that group's males. The female returned to her family and after interactions with her brothers went back to the second group accompanied by her brothers who at-



tacked the males there until she was accepted! Her brothers then returned to their own family group.

As in the previously discussed book, this book is extensively illustrated in color, mostly with plates from old bird books, but here the plates are chosen to illustrate a biological subject being presented, rather than primarily as examples of bird artists. There is an extensive bibliography, a short glossary and a full index.

The central figure in Birkhead's history, the man he considers "the most influential ornithologist of all time" is 17<sup>th</sup> Century polymath, cleric and naturalist John Ray (1627-1705). A recent book on history's greatest naturalists refers to Ray as the "English Aristotle" (Huxley 2007 – a book I also recommend). The encyclopedia *Ornithologia Libre Tres* by Francis Willughby, published by Ray in 1676, is often considered the birth of ornithology. (In Chansigaud's book the subtitle of his 17<sup>th</sup> Century chapter is "The founding work of John Ray and Francis Willughby".) Ray was the son of a blacksmith. Willughby, Rays' junior by eight years, came from the aristocracy. They met as students at Cambridge and in spite their different backgrounds became best friends and coworkers. When Willughby died in 1672 at age 37, Ray became one of his executors and tutor to his children. Until then primarily a botanist, Ray completed the bird book they had been working on, publishing it under his friend's name. *Ornithologia* presented the first modern classification of birds, often considered superior to the one proposed by Linnaeus sixty years later (Stresemann 1975). For over 300 years debate has continued, heatedly at times (Raven 1942, Bircham 2007), on who should receive the majority of the credit. One of Ray's later books, *The Wisdom of God Manifested in the Works of the Creation* (1691) inspired the title of Birkhead's book. Following Haffer (2007), Birkhead presents the case that after Ray ornithology followed two parallel, but separate paths. One, with roots in *Ornithologia*, stressed classification and faunal studies, while the other, stemming from *The Wisdom of God*, stressed field study. The two branches were

reunited into modern avian biology in the 1920's and 1930's by Erwin Stresemann and David Lack. In a way Chansigaud's and Birkhead's two histories reflect that dichotomy and complement each other very well.

Though the Linnaean Society of New York is not mentioned in either book, papers published in Society publications are mentioned, sometimes prominently. Birkhead's bibliography includes papers by Ernst Mayr, Margaret Morse Nice and Nikko Tinbergen originally published in the Society's *Proceedings* and *Transactions*. Chansigaud also mentions Nice's landmark Song Sparrow work and Tinbergen's Snow Bunting study.

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#### LINNAEAN NEWS-LETTER

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