NYC American Kestrel Newsletter – Issue #2

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Hello All,

Reports regarding kestrels continue to come in from around NYC. Just this week Ben Goloff let us know about a Kestrel nest on west 104th street and Broadway. Also, Annie Barry at Inwood Hill Park is once again seeing a kestrel in the park (as well as nearby Baker's Field), but she is having a heck of a time finding a nest on an apartment building near the park.

Such scenarios are not uncommon - though the American Kestrel is the most common nesting raptor in NYC (yes, more common than the Red-tailed Hawk), finding a nest in your neighborhood is a challenge. It might take a couple years. Right now in mid-April, some females are sitting on eggs which means they are hidden from view 95% of the time. You'll have to get lucky and see the male bring food to an opening on a cornice on a building. The female might take the food and fly a few feet away to consume it, while the male goes to brood the eggs. These are the best signs at this time of the year that you have indeed found a nest. When the eggs hatch, particularly on warm days, the female will usually sit about 25-100 feet away from the nest entrance, and she likes to chase away any intruders to the nest building and vicinity. These include crows, squirrels, red-tailed hawks and sometimes even peregrine falcons. Here is a comment from Chris Nadareski, who has studied (and banded) Peregrine Falcons in NYC for the last 20 years or so: "**I have often observed a pair of Kestrels interacting with the Peregrines at the Met Life Building. There is also a pair that interacts with the Peregrines at the Riverside Church** but I'm not sure where they are nesting." So anyone out there know about these two pairs of kestrels?

Attached is an article (with color photos) about a pair of kestrels on 26th street on the west side of Manhattan. It was written by long-time veteran kestrel watcher Chuck McAlexander in 2007. I've added two photos of what his "street" looks like, and the exact area where the kestrels nested in 2006-07 (and are likely nesting now). NOTE: I apologize for the large size of the attachment (5.5MB), bit I had to scan the article and keep the file size large so you would be able to read the text as crisp and not blurrrry. Apologies.

If I schedule a Saturday morning field trip in May to 2-3 kestrel nest sites, would anyone be interested? No charge (as in free). We would go to 2-3 sites in Manhattan and all you would need is a Metro Card and lunch. Let me know if you are interested. And if you no longer wish to receive these updates, just let me know and I will remove your name from the list.

Best Wishes, thanks and do keep those reports about kestrels coming in,

Robert DeCandido

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KESTRELS ON 25TH STREET-2006

Chuck McAlexander

It was an eventful, if not productive year for the 25th Street American Kestrels. Behavior not typical of the species led to events that greatly affected the number of offspring produced, as well as the number that managed to survive. Most of the observable activity took place in the first half of the year. Even so, there was plenty to see and to try to understand.

The small, dark male that sired last year's offspring, stayed over the winter using the nest cavity as a roost. This cavity is well suited for both purposes as a consequence of its accidental design and fortuitous location. The cavity is a disconnected remainder of a vent pipe leading from a heater to the outside. It is about two and a half feet long, six inches in diameter and was sealed on the inside after it was discovered that kestrels were using it as a nest cavity. It was not sealed for the benefit of the birds, however. It was taped off because the birds entered the room containing the pipe and were difficult and time consuming to remove.

The female of the pair was not seen until January 29th. In fact, I cannot be sure the female that nested in the 25th street cavity is the same one that did so last year. To complicate the issue she arrived at about the same time as a larger, brighter plumaged male I designated Male2. Both the female and Male2 were seen investigating various cavities in the area, including the previously used pipe, even though it was still being used as a roost by the smaller, darker male, now called Male1.

By February 5th things started getting a little strange. I saw Male1 emerge from the pipe, perch on top for a while, then leave for his morning hunt. Later that day a starling investigated the cavity, but drew no territorial defense. Apparently, the starling was wise enough to visit when it was sure no kestrel was inside or keeping an eye on the pipe. Later yet, Male1 brought a fresh kill to the cavity which was grabbed by the female on her way out. Male1 then entered the nest causing Male2 to emerge and perch on top of the tube. It was as though Clark Kent went in and Superman came out! The difference between these two birds' appearance is striking.

It would seem most unlikely that two male raptors, vying for the same female's attention would tolerate each other in the same area, let alone the same nest cavity. Yet, by February 10th I found both of them comfortably perched side by side on top of the pipe. This behavior continued through much of February. I again found them shoulder to shoulder on the nest pipe on the 22nd. On the 26th, although both were initially perched separately, both entered and stayed in the nest together.

That same day brought the season's first observed copulation. Poor quality optics, sun glare and distance prevented me from determining which male was involved, but with 28 to 31 days for incubation and another 28 to 31 days from hatching to fledging, there was now a chance I would see some new kestrels by the last week of April.

American Kestrel Nest
Manhattan - Chesea District
West 25th Street
Five Kestrels Fledged here in mid-May 2007
© Robert DeCandido, PhD

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American Kestrel Nest
Manhattan - Chesea District
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Five Kestrels Fledged here in mid-May 2007
© Robert DeCandido, PhD

Determining paternity continued to be a problem. I saw another copulation on March 12th, but again could not determine which male participated. Male1 was being seen on the nest tube in the early mornings, but Male2 perched there in the afternoons. Obviously, both males were still comfortable with each other, still sharing a nest cavity and possibly a female.

The next two weeks brought only two observations of interest. On March 23rd, one of the males flew into the area carrying a rat that was not much smaller then he was. The way the kestrel struggled, it was obvious he was carrying a load very near his maximum ability. Predators in general do not pick prey too big or too dangerous to handle. This bird's exception opens the question whether he was 1) trying to impress his mate, 2) getting the only meal available, or 3) scavenging a rat already killed by some other means.

If either of the first two options were true, as a male, I understand. But, the third choice leav es me wondering if kestrels will actually scavenge, a behavior I have not yet observed. A fourth possibility is that the rat, addled by some toxin, was behaving in a manner the kestrel just could not resist. A debilitated prey is the meal of choice for any predator. Unfortunately, this would lead to a higher toxin load for the bird and his offspring.

Toxins are not the only hazards kestrels face. The female was having her own troubles. The afternoon of the 23rd, she spent a good half hour preening. This was the full Monty. She dug and scratched with a fervor and determination that, to me, suggested a possible ectoparasite load. I have seen a kestrel do a full body preen before. It looks like it might be pleasurable. But, this female was not enjoying anything. After a considerable time and effort, she just sat in the sun with all her plumage erect. I do not know whether she achieved relief, or just gave up.

March 31st, about a month since I first observed the pair mate, there was evidence of nestlings. Male1 perched across the street with a freshly captured bird. As the male was plucking the prey, the female could be heard calling from the nest. Once the meal was shucked, the male flew to the top of the tube with prey in talon. The female then emerged from the cavity and flew to where the male had plucked the bird; Male1 joined her, passed her the food, and then returned to and entered the nest.

What is telling in this scenario is the method of prey preparation. Nuptial food offerings are generally left intact. Totally plucked prey is reserved for nestlings and new fledglings. Probably, the female perched nearby and ripped the meat into chunks of a size suitable for hatchlings. Then, after a short time, returned to the nest to feed the partially digested meal to her new chicks. This not only would make the meat digestible by the very young birds, but it would also pass a seed crop of necessary bacteria to their digestive systems.

By mid-month the male became decidedly more defensive of his territory. The pigeons which were perched near the cavity entrance were no longer tolerated. The male also became a little more deceptive. He continued to provide food for the nest, but also cached the occasional catch-for himself. To prevent the female from discovering his meal, he would stash it in an obscured spot, then change locations several times in a short period.

Smaller prey items would be passed to the female who would take them directly to the nest. After all the nutrition was removed and fed to the chicks, the skeletal remains would be taken from the cavity and dropped at a reasonable distance. Larger prey birds might leave a remainder which, on occasion, allowed the male to perch and gnaw at his leisure.

By April 22nd, Male1's defense of the nest became an active claim to the area. Nearly any species that came within fifty feet of the entrance was pursued; especially if it showed any sign of slowing or attempted to land nearby. The female, however, seemed indifferent to any pretense of secrecy. She would perch on top of the pipe with no concern for whoever might learn the location of the nest.

In reality, the male's over-aggressive defenses amounted to a large sign indicating the nest's whereabouts. However, it also demonstrated there would be no free lunch. On April 30th, both kestrels were perched close to the nest when a Herring Gull showed too much interest and too little speed. Both birds pursued the gull and the male even raked its back for good measure. They did not break off the chase until they reached the end of the block.

That same day the female delivered food to the nest twice. The first bird was a fresh capture, which she dispatched with several bites to the

back of the neck. She then took the whole, unplucked but dead bird into the nest. Later, the prey was delivered in a more prepared condition. Most probably, she captured the first bird herself, but received the second one from the male. Whole birds, whether plucked or not, can indicate the state of development of the nestlings. As they mature, so does their ability to handle prey. The bites offered by the female get progressively larger until the chicks begin dismembering the prey themselves. By the time they fledge, they can do everything but catch and kill a meal, although they are slow and clumsy at first.

On May 12th, in the late morning, two workers cleaning the sidewalk below the nest found and captured a very young female kestrel. The bird could not fly and was still very downy with a short tail. It was an overcast day with rain forecast for the evening. The bird was put in a cardboard box on the roof over the nest. The box was turned on its side so the chick would have shelter, but would not be trapped. We hoped, as had happened in previous years, the parents would feed and protect the vulnerable bird.

At ten o'clock the next morning the male carried food to the nest. Prior to his arrival, high begging calls could be heard coming from the nest, indicating the continued existence of nestlings inside. A conversation with Larry, the super of the building, revealed that the box on the roof was empty and the young female was nowhere to be found. I took this as an encouraging sign that the young bird had not expired of hunger or exposure during the night.

At five o'clock that day, Larry hailed me from across the street as I was making my way down the block to go home. He had been watching as a kestrel captured, decapitated and then dropped the young female to the sidewalk across from the nest. I retrieved the still warm corpse, but could not find the head. Perhaps it fell to the roof where the avian infanticide took place. I was incredulous as well as unsure how much of Larry's account to believe, so I came up with several explanations for the death, none of which were even close to what I eventually decided had actually happened.

From May 14th to June 28th I saw no activity at the nest. I assumed the failure of the first clutch to be cause enough for the birds to stop trying, or at least to be making a second attempt elsewhere. June 29th brought revelation. Male2, which I hadn't positively identified since March, brought food to the nest. Upon his arrival, the female left, presumably to hunt. I could only interpret this as a second attempt by the female, but with a new male. This was reinforced by a display of a nuptial flight I call raptor tag. Also, both Male2 and the female were perched together atop the nest tube for a while before they entered. Male1 was not seen in the area. It would seem that Male2 was responsible for the death of the first offspring and for driving Male1 from the area in order to claim both his territory and his mate. Perhaps Male2 should be renamed Oedipus.

By the second week of July the female was spending most of her time inside the nest. Male2 had become very aggressive in his defense of the territory. Again, a Herring Gull had to be removed from the area, as before, with the help of the female. Although the male was quick to launch an attack on a perceived intruder, only a true threat, such as the gull, would actually be engaged. When pigeons got in the way, the kestrel would stoop in their direction, but time his assault to just miss them as they scattered. He seemed to want control of the area, not an unnecessary battle.

Sometime between July 9th and 16th a male fledged. My first sight of him came on the 16th as he flew to a high perch. His clean, fresh plumage accented by a broad, white terminal band on his tail clearly set him apart from the worn and haggard looking parents. Five days later, both adults were still defending the nest, but by August 3rd a pigeon was allowed to perch atop the nest tube. Obviously, there was to be no more activity there that year. I did find a female, Male2 and an immature male flying and perching in the area, but not near the nest cavity.

Not long after the pigeon declared the breeding season to be over, Male1 reappeared. He perched atop the nest tube under the eave to shelter himself from a passing thunderstorm. Male2 was not to be seen again that year, but the female stayed in the area.

Throughout the fall and into December both Male1 and the female could be found perched in the area from time to time. As in the past, one of their favorite perches was the top of a water tank above and just east of the nest. They did not perch together, but did not seek separate territories, either.

On the morning of November 3rd the pair found themselves at the bottom of a river of

birds. Starting just before dawn, large numbers of robins accompanied by about a 10%, mix of sparrow-sized birds flew due north over the ne st. Most of the visible birds flew at the 30th floor level, but there were many more birds very high overhead. The scene was majestic and inspiring and would compare favorably with the wildebeest migration of the Serengeti.

Just at dawn both kestrels were hunting. Quick glimpses of either bird were barely enough to determine gender. But, seeing them pump powerfully to gain speed, then fold into a stoop configuration to rocket toward their prey left little doubt as to which species they were. They did not hunt together or cooperatively. Neither seemed even aware of the other's existence, yet both behaved as if they were masters of the territory. In fact, they are.

As the first hour after sunrise progressed, the endless flow of migrants continued. The species in the stream gradually changed and so did the number of birds. For each robin that left the scene, two juncos took its place. For every fifth robin, add a kinglet to the juncos. There were other birds in the mix, too. Probably, most of them were Yellow-rumped Warblers and some blackbirds. Great multitudes of the two species were reported elsewhere in the area, but I could not positively identify either of them. Add in some woodpeckers, mostly Northern Flickers, an odd mockingbird, a phoebe or six, and-some Blue Jays and you get a general idea of the make-up of the flight.

At times there would be a small break in the flow, but this was only a gap in the birds low enough to try to identify. The upper levels still showed lines and waves of birds, dots actually, that I took to be birds. Never, during the first hour, was there a time when I could look up and not see thousands of birds making their way north.

After the kestrels had both dined and preened, as is their habit, both returned at various times to perches within my view. But, neither could stay still for long But the birds, no longer hungry but still an aerial predator, gave in to instinct Whenever a passing migrant flew into a kestrel's kill zone, it would be pursued, but only weakly. The kestrels would launch toward the bird and stoop in its direction, but not at great speed and not for effect. The terrified migrant would be spared at the last minute, as the falcon would stretch a talon in its direction as it sharply turned to just miss the target. The constant taunt of so many easy marks was just too much for even a well-fed hunter to ignore.

As the flight moved through, the behavior of the passing birds changed. By the middle of the second hour, there were more and more low flying birds. Many were flying below even the sixth floor roof level and had to go around the buildings. Others, in slightly better shape, would just make the roof ledge. There, they would pause for a moment, then continue on. The stragglers bringing up the rear of the migration were showing obvious signs of fatigue and hunger. This made them even easier and more attractive targets for the kestrels, but they were tiring of the morning's game, too. At one point, a small migrant landed not ten feet from a perched kestrel. The potential meal rested for a good thirty to forty seconds, and then flew weakly off. In that time, the kestrel could have easily captured and dispatched the bird. Instead, he just sat and watched.

November 18th brought an insight into a kestrel's ability to adapt to its environment. I found both birds perched on the top of the same water tank. They were shoulder-to-shoulder on the soccer-ball sized cap, so when one shifted its position, the other had to adjust as well. This caused the pair to do a slow rotation on the ball for about forty minutes.

During the whole period, several batches of small birds flew around or over the kestrels. Most of them were Dark-eyed Juncos, but there were others I could not identify, too. Finally, just at 11:00 o'clock, the female got fed up with the taunting or just got hungry. She took off after one of the juncos as though it did not matter if it took all day to catch it. The junco, of course, did not appreciate that the kestrel was not working all that hard to catch up. It frantically flew down the block just avoiding capture by executing a sharp turn at the last second before the talons would have struck home. The kestrel was laconic, but not indifferent to the outcome of the contest, so it too, would make a sharp turn and pursue the bird in the other direction. Another sharp turn saved the junco a second time, but the kestrel did not give up the chase. After the second near miss, the kestrel changed tactics. Instead of turning and following the junco along the block, the kestrel made a wider turn, gaining speed and flanking the

now very tired junco. This proved to be a very effective maneuver. As the junco tried to dodge death by dropping, then by skirting around to the side of the kestrel, it found itself pinned between two sets of talons and a concrete wall. Needless to say, she plucked the junco from the air the way I might have picked an apple from a tree. There never really was any doubt, about the outcome. She took the lazily harvested meal to the roof of the building and proceeded to dine. The whole time, the male stayed on his perch.

The thought-provoking part of all this is whether this hunting technique is an adaptation to city life. In the open countryside, there are no walls to maneuver a tired prey into. Trees and brush only provide cover and probably an escape for the prey. Here, instead of very energy intensive rapid pursuit, a slower, easier pace will ultimately tire the prey and allow it to be maneuvered into a position of no escape. It looks like this city bird has used its brain to improve its life. That is hard not to appreciate.

Throughout December the kestrels were into their winter routine. Most views I got were of Male1 on a high perch, or sometimes on the nest tube. The female put in an appearance occasionally, but she preferred to perch out of my view most of the time. Warm weather allowed the pair to perch outside almost always. Use of the nest cavity as a heated roost was unnecessary until after the New Year had begun.

This being the third consecutive year that Male1 and, presumably, the same female had nested in the same cavity on 25th street, the pair should have settled into a regular routine dictated more by season and the weather than by requirements of food and shelter. The addition of a second male changed everything.

What is most puzzling is Male1's acceptance of the presence of Male2. Shared perches, simultaneous occupation of the nest cavity, no evidence of a struggle, and a general lack of overt aggression indicate that Male1 did not view Male2 as a competitor early in the year. It is possible that Male2 is one of Male1's offspring from 2005, but his being a fully mature adult should have trumped any response other than confrontation and aggression. Sadly, that did not happen and the offspring sired by Male1 were lost. That Male2 helped produce a male fledgling in the second clutch hardly equals the seven fledged the previous year.

Perhaps Male1 is at the end of his reproductive abilities and possibly, even his life. So far, both he and the female have become residents and appear to intend to continue as a breeding pair. Whether Male2 will return in the spring and offer challenge for Male1's mate and territory remains to be seen. And even if Male2 did and were successful, there would be no guarantee she would again accept him as a mate. Humans are not the only species that has to deal with the vicissitudes of life.