

NYC Kestrel Newsletter #3

22 April 2008

Hello All,

This week we report some interesting observations, regarding food items eaten by NYC Kestrels, reported by Eric Cohen (Queens) and Patricia Essler (Bronx). However, before we get to the main course, an introductory note about NYC (Harlem) Kestrels from a visitor from Michigan:

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Subject: East Harlem kestrels again

Date: Apr 21, 2008 9:43 AM

Hello again - We're visiting our daughter here for a few days. We've seen a female kestrel several times on the antenna, eating gobbets of something, **so maybe these are her meal breaks from a nest?** If so, the nest might be where it was last year.

Our daughter Lyra took a picture of a brightly colored male kestrel in December,

Best wishes,

Barb and Dick Ward (Eastpointe, Michigan)

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Barbara has observed two interesting things. First, it is likely true that many female kestrels in NYC are now sitting on eggs, and don't often leave the nest cavity...the exception being when eating a food item the male has brought to them. Second, Ms. Ward mentions a photo taken of a kestrel in December (on the same perch). This is good evidence that some (if not all) of our local kestrels remain in NYC year-round. Some individuals (pairs) may move several blocks from the nest site in winter in NYC, but we are confident that they do not leave NYC in winter for better habitats to the south. However, we are open to correction and any observations/ideas that you have to support a migration hypothesis (by even one bird). Finally, attached are a couple of photos of the E 118th street nest in Harlem.



Male American Kestrel photographed in Central Park with a House Sparrow in its talons

© Deborah Allen



Kestrel Nest
American Kestrel Nest
East Harlem - 119th Street Nest
1 June 2007
© Robert DeCandido, PhD



Manhattan: East Harlem (118th street near 2nd Avenue)
Female American Kestrel at Nest
26 May 2007
© Robert DeCandido, PhD



We also received some very exciting news from Patricia Essler from the New York Botanical Garden in the Bronx:

Date: Apr 19, 2008 5:05 PM

Bob,

After seeing the beaver dam, Stephen I went our own way. We're sorry to have missed the wood ducks, however, we did want to let you know what we saw on our own. Besides a garter snake, snapping turtle and some frogs (green we think, but not sure) we saw 3 Red Tail Hawks while we sat under the Tulip Trees in front of the NYBG Library. But our own best sighting of the day occurred while we sat on the bench in front of the pond in the Rock Garden. **At 12:40 pm a red bat flew off a limb of a large tree on the other side of the pond. It was so beautiful as it fluttered around with the sun shining through its wings. I jumped up from my bench and watched to see where it would land. It went back on a limb of that same tree. Within 3 minutes a male Kestrel flew in and landed on the branch, grabbed the bat in its claws and flew away. Although I felt badly for the bat, this is what it's all about.**

Love,

Patricia and Stephen

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And just as interesting are the photos posted by Eric Cohen in Sunnyside, Queens of a kestrel eating a lizard...see the last two photos posted at the link below:

<http://picasaweb.google.com/ericmarccohen/SunnysideKestrels?authkey=Q4kfiIH3uZQ>

I did some research and found this article that appeared in Newsday in 2003. The lizards in question are known as Italian Fence or Wall Lizards.

<http://www.newsday.com/other/special/naturalworld/ny-walllizard3272636may11,0,5447771,full.story>

The Lizard King

The Island's only such species, the Italian wall lizard rules the roost - and imaginations of its host
By Bryn Nelson | Staff Writer [Newsday]

May 11, 2003

Two years before astronauts walked on the moon, a few dozen colonists took their first small steps onto another foreign landscape. The exact details are lost to legend, but the settlers soon discovered that Garden City wasn't such a bad place to land.

For a lizard.

Various tales have sprung up to explain the emigration of a small group of wall lizards from the north of Italy to the suburbs of Long Island. The most likely story involves a 1967 shipment destined for a now-defunct pet supply store that was waylaid by a minor accident, a broken crate and some very swift escapees.

No one knows for sure how many of the cold-blooded reptiles are now basking in the sunshine of suburbia. But they have adapted remarkably well to their adopted homeland, and they've extended far beyond Garden City.



As in their native precincts of Italy and southern Europe, the lizards are thriving in landscapes shaped by humans, in pockets of Nassau County as well as in Queens, Brooklyn and the Bronx. A diet of spiders and crickets and other small invertebrates, a sunny spot to provide warmth and aid metabolism, a haven in the cracks and crevices of walls and gardens - all are abundant here.

The lizards have proliferated along the grassy corridors of railroad tracks, drainage ditches, and power lines. Others have likely hitched rides to new homes in the pockets of admirers, or even in piles of mulch.

"I'm sure there are tens of thousands, and they're spreading fast," says Hofstra University herpetologist Russell Burke.

Despite the advance, the tale of New York's Italian wall lizard population has not followed the familiar plot line of an invasive species wreaking havoc on the natives. Long Island has no

lizards of its own, and the wall lizards seem to have filled an environmental niche that was previously vacant. As far as anyone can tell, they have yet to cause any harm.

Instead, their impact is perhaps most apparent in the childlike wonder that follows in their wake. A biologist laughs at their antics in a nursery school garden. A father eagerly maps their spread. Children clamor to glimpse them on a playground.

Sometimes nature's lessons come in unexpected ways.

Burke has picked a warm September day for fishing, though his black fishing pole seems strangely out of place among impatiens and ornamental shrubs. The small noose dangling from the pole offers another suggestion that this will be no ordinary fishing expedition.

Burke is after the wall lizards, a source of both academic research and personal fascination. He has conducted many of his field studies here, in the three-tiered side garden and spacious backyard of the Garden City Nursery School.

At first, the garden appears deserted. Then a single lizard scurries across a railroad tie retainer and behind a small evergreen shrub. Within seconds, the creatures known as *Podarcis sicula* are everywhere. Grass-green backs. Mottled black and brown patterns with turquoise spots on either side. Basking on ornamental rocks, guarding bits of territory, surveying the scene from the safety of cracks in the garden's lower echelons.

With a fisherman's patience, Burke moves the noose ever closer to the head of a wary lizard. A quick jerking motion and he's made his first catch of the day, a 5-inch-long juvenile male with a dull green back, caught harmlessly around its head.

Burke paints the lizard on each side with a red marker, just as he's marked others with identifiable combinations of blue or black or green. His next catch - a 7-inch-long adult female with a typically narrow head - receives two red blotches on each side.

After another few minutes, he's caught the one he's been after all day, an elusive adult male that measures about 8 inches in length and has his own territory near the far end of the garden. The lizard promptly rewards Burke's efforts by biting him.

"Oh, that's enough of a pinch to hurt." He laughs as the lizard glares at him.

The herpetologist points to a row of scales where the lizard's hind legs intersect its abdomen, a region identifiable on males by a brown spot. It's from the femoral glands here that the male secretes its distinctive pheromone, a chemical calling card of sorts.

"It's probably like, 'I'm a big tough guy and this is my territory,'" Burke says of the scented message. A male lizard basking in the sunshine to regulate his body temperature and synthesize Vitamin D also may be marking his territory as he lays flat against the railroad ties, but Burke can only speculate.

The big male gets two blue marks on each side.

This temporary labeling system will help Burke study how the lizards feed and mate, and how they defend their territories. Some have done so for seven years or more - a ripe old age for a lizard.

He has already determined that they are almost genetically identical to one another, a hallmark of a population founded by a few individuals. Yet the New York settlers are, surprisingly, free of common parasites such as lizard malaria, and are reproducing even faster than their closest genetic kin in Italy.

The Italian group remains active year-round, but their New World cousins stop virtually all activity in the winter. Since Burke has discovered that the lizards cannot tolerate freezing temperatures, he would like to answer the question that's been nagging him for years: How do they survive the winters?

In Topeka, Kan., Larry Miller wonders the same thing. Related lizard species have ventured into Cincinnati and Victoria, British Columbia, and observers recorded a colony of Italian wall lizards in Philadelphia that petered out several decades ago. But active populations of the creatures also known as ruin lizards now inhabit only two known regions of North America: Long Island and Topeka.

Miller, a biology teacher at Topeka's Northern Hills Junior High School, also is mystified as to how they behave during the coldest weather. He hopes to answer some of the lingering questions by establishing a lizard study area near his school.

"I've been teaching science for about 30 years," he says, "and they're one of my best teaching tools."

Again, the details of the Topeka introduction are somewhat hazy, but a pet supply store and an absent-minded owner figure prominently. Miller estimates the lizards have expanded at least a quarter of a mile in all directions from their suspected release site in the late 1950s.

"They've moved in well and they're an animal that has managed to fill a niche that was created by humans," he says. Their urban success story is perhaps best documented by Topeka's prime lizard vantages: outside an auto parts store, a KFC restaurant and a Dimple Doughnuts shop.

It's about three-tenths of a mile from Long Island's Hempstead Turnpike to the generally agreed-upon point where the store-bound lizards made their escape - a site known to a few enthusiasts as Ground L. This stretch of Cherry Valley Avenue runs past ball fields, a bus depot and the municipal yard of Garden City.

The village's composting program at the municipal yard delivers rich black mulch to golf courses, recharge basins and residents, all of it free of charge. The "black gold" is full of nutrients, and lizards, who may be getting a free ride across the county.

Just down the road, the village's community park includes three landscaped pools, a miniature golf course, and other favorite spots for lizard-catching. A wall lizard has escaped on more than one occasion by relinquishing its twitching tail to the sweaty grasp of a young pursuer, a defense mechanism that also helps it evade cats and birds. The loss is only temporary, however. The lizard will soon grow another tail.

Nestled between the community park and the mulch piles lies lizard paradise - the 1-acre site of the Garden City Nursery School, which has harbored the creatures for more than two decades.

"They became such a fascination to the children and parents and teachers that the curiosity just

increased tremendously," says school director Ann Amengual.

The lizards have since become the school's unofficial mascots. A green lizard thermometer commands a prominent position on a pillar by the entrance, the parents have produced several versions of lizard T-shirts for the children, and even the school's board has gotten into the spirit.

"We have a tradition now where the outgoing president gets a gold lizard pin," Amengual says.

Springtime at the school arrives with the wall lizards. "Science for young children is not about learning facts, but it's about stirring curiosity and learning about their life and their world," Amengual says. "That's what happens here. It's contagious - everyone loves these lizards."

Rob Alvey's love affair with the lizards began in 1985. As a teenager in the summer of '68, he had mowed the school's lawn, but it wasn't until he returned as a parent that he first saw them. Lots of them.

The collector of more than 10,000 frog-related items soon found room in his life for yet another small green creature. Alvey, a geologist, even got his daughter involved in an early tracking project using color-coded beads sewn onto the back of each lizard.

When he was appointed to the Garden City Environmental Advisory Board in 1992, Alvey promptly launched a project to trace the background of the lizards. In 1993 he appealed to residents to help him track the reptiles by reporting sightings. Thanks to the Garden City Lizard Watch, he was able to map their expanding range and estimated that they were advancing by a block to 1 1/2 blocks every year.

"I was concerned whether this was a good thing, a dangerous thing," he recalls. "And the more I learned, the more I discovered that this is not something that we need to worry about."

At his home in Garden City, Alvey unfolds a rumpled map of the New York City metropolitan area on his dining room table. With a green highlighter, he marks some of the other known colonies that have radiated from Garden City: Planting Fields Arboretum. The Carle Place Water District. Mount Hebron Cemetery in Flushing.

In 1994 Alvey introduced four lizards to another one of his projects, the Garden City Bird Sanctuary near his home. Now, they abound throughout the 9-acre site. "They're prolific," he says. "They have a natural Viagra in them somewhere along the line."

Another lizard aficionado, Queens College associate biology professor Jon Sperling, remembers collecting lizards of his own at the Garden City municipal yard 12 or 13 years ago.

Perhaps not coincidentally, separate colonies have thrived at his home in Floral Park and at Queens College for the past 12 years. Unlike many of the students, the campus lizards prefer to hang out by Rosenthal Library, where they dart among the prostrate red cedar planted on an incline near the entrance.

"You can see them sunning themselves either on the plants themselves, or on the decor on the incline and on the stairway," Sperling says.

He has integrated the lizards into some of his lessons, asking students whether they've noticed them. Many haven't.

"It's a matter of observation," he says. "People could live next to them all their lives and not see them. Some people are blind to things like that."

In the winter months, few New Yorkers have seen the lizards. One of the few exceptions was when a Long Island homeowner spotted several huddled together beneath a lifted slab of sidewalk.

Last fall, Burke designed a project for high school student Allison Goodman to find out where Italian wall lizards go when the temperature falls below freezing. But neither electrician's tape nor glue held his tiny radio transmitters in place, and the mystery remains - at least for another year.

Despite an unseasonably warm afternoon that bathes the nursery school's garden in light, the wall lizards refuse to stir from their seclusion on St. Patrick's Day. But the following afternoon, a few emboldened members of a colony residing in the Hofstra University greenhouse venture into the adjacent yard to enjoy the sunshine. By the next week, a few more make brief appearances near the biology building at Queens College. They begin showing up in scattered yards around Garden City, and then at the nursery school itself.

At the far end of the school's garden, a midsized lizard ventures out on a railway tie before its courage falters and it scurries between the cracks of the wooden tier. Then a tiny lizard with only a hint of green on its back makes its afternoon debut - a summer hatchling with spring fever. But its day in the sun is quickly curtailed by an aggressor twice its size that is in no mood to share its garden fiefdom.

Amid the patchy afternoon sunshine and chatter of small children arriving for school, the wall lizards of spring have returned.

"I didn't see one, but I thought I heard one," says a little girl with a blond bob. Her two friends quickly join her, shushing one another as they tiptoe toward the near end of the garden. Three pairs of feet shuffle around a bush and curious hands pry through the greenery, but no lizards turn up.

"I think we scared it away," the little girl says as they head back inside. Moments later, the lizard reappears just where she said it should be, with a nearby cascade of ivy providing a hideout.

Later that afternoon, Burke and a pair of lizards join a group of schoolchildren for a session of show and tell.

Who's seen a lizard?

Hands shoot up and several kids have stories.

What eats them? Burke asks. Snakes? Cats?

"Lions," offers a boy.

"Cheetahs," says a girl.

For the afternoon lizard hunt, 18 young assistants peer into the garden, around the plastic border

of the playground, between the cracks in the back fence. But the wall lizards, perhaps sensing the commotion, have apparently called it a day.

It doesn't matter. The lizards will be out again next week, and for many more weeks after that. Until cold weather forces a temporary retreat, they will be playing hide and seek, scampering across the fence ties and delighting a few dozen young naturalists eager to see, to touch, to learn the simple lessons that nature - and fate - have brought to their own backyard.

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Well, if you are still reading - Thank You. Do send us your sightings about the local kestrels. Next to nothing is known about these urban falcons in North America, let alone in NYC. I think we can change that.

Regards,

**Robert DeCandido, PhD
The Bronx**



Male American Kestrel looking for prey (Photographer Unknown)