

# THE ELLIOTT NEWSLETTER

## Nature Notes from Central Park

Vol.2 No. 1

January 1996

### Christmas Bird Count



We were lucky. December 17, 1995, was bright, calm and not too cold. At 8 AM a large crowd of more than 50 people assembled at the Pumping Station. They filled out name & address cards and gave in money for National Audubon. Birders divided into teams for the 7 sections of the park. Each team was handed maps and tally sheets. We were expected to count starlings this year (groans), non-flying pigeons, and go to Loeb Boathouse at 12:30 for the full park count.

We were not alone. Every year since 1980 bird counters have been joined by members of the media. This year Susan DeVico, public relations person for National Audubon, was there with a three-man team from ABC television. Jo Lang wired me for sound and held a dirty dustmop over my head to catch the words. Tom Budai began filming the first of 4 tapes, and Daniel León, the producer, rushed off to find a tripod.

As we strolled south Tom walked backward, filming, while I interviewed Irving Cantor. Irv first made a Christmas Count of Central Park in 1934. It was the Depression and there were lots of make-work jobs for unemployed people. Irv said the whole park was manicured, every blade of grass cut just so, and that made the place less attractive to birds.

At the South End we were met by Mark Allen, who opened the gate to Hallett Sanctuary. Inside, we clambered through trees and over bumpy ground. Irv called a red-bellied woodpecker and Tiffany Remsen, a young, new birder, spied and described a chickadee, white-breasted nuthatch, mourning dove, several titmice and white-throated sparrows. Susan Fischer tallied them all.

We were surprised by a red-tailed hawk that flew along 59 St and landed on the art deco platform of a tan building near Sixth Ave. It dropped into this lookout with the skill of daily use.



The media crew found a tripod and rushed to the Ramble for more birds and birders. We spread out and moved north. Some of us found Fifth Ave. cardinals near the Arsenal, then circled the Zoo, peering through the fence. We saw birds at a feeder and a turtle sunning itself beside a heated stream. Moving quickly through the Mall we reached the Boathouse at just 12:30.

The Southwest room was packed. Murray Liebman handed out Central Park Count sheets that had been photocopied kindness of Lewis Rosenberg. I was rewired for sound, told where to stand for the camera, and we began the totals. When I realized the filming had stopped I asked and was allowed to sit down.

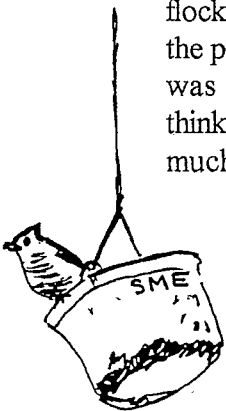
The TV record of this count was to appear before Christmas on the Peter Jennings newscast. It was bumped because of a snow storm and appeared Jan. 2. I was told crews filmed 13 hours of National Audubon Christmas Bird Counts in New York, Florida and Colorado. All that coverage had to be reduced to only 2 minutes of air time, leaving far too many birds and birders on the cutting room floor. My thanks to Howie Moskowitz whose people photos made these drawings possible.

## Bursting with Birds

It was a surprising count. Birders who came for rarities, such as a chat or a flock of snowy egrets, were disappointed. The rarest bird this year was a Swainson's thrush found near the tennis courts. This species of thrush was seen and described by Starr Saphir 2 years ago, so another written description seemed superfluous. If this count lacked exotics, it will be remembered for sheer numbers.

The most unexpected arrivals were Canada geese. On Dec. 15, I was surprised to see a flock of 49 feeding on Sheep Meadow. By count day, flocks of geese dotted the meadows over the park. Paul Osénbaugh, who manned the ramparts at the Castle, counted 451 in the air. This was such a huge increase over the 1's, 2's and 0's of past years I decided to go with it. Now I think I should have tallied the sit-downs as well as the fly-overs. The surge of Canada geese was much larger than we understood. It was also later. Flocks were still flying south in January.

If we were unprepared for the influx of geese, some of the birders looked positively glinty-eyed in anticipation of the tufted titmouse totals. Even so, the numbers were stunning. We counted 36 titmice in 1994. In 1995 the tally jumped to 789! That's a 22-fold increase say Howie and Murray Brettschneider. Like stars and new galaxies, I have no idea how the old numbers and new numbers could be charted.



We start the Central Park count early because of the gulls. The flocks on the Reservoir need to be counted before they disperse. Because our territory is finite, it only takes a half day to count. After we have a snack and total all the sections of the park, the birders can go out and explore locations for the rare birds of the day. In the afternoon several hotshot birders roam the park acting as late-day mopper-uppers. This year, Nick Wagrerek went to the North End where he saw 2 pine siskins, a purple finch and a winter wren. Good that they showed up for the count, sad that they didn't do it in the morning! Tom Fiore used his Zoo card and went inside to find a flock of 8 cedar waxwings eating berries. He also found a towhee, a catbird and a brown thrasher. While Nick watched a winter wren in the North End, Tom watched one in the Zoo, giving us 2 for the count. With their efforts, we achieved a total of 62 birds, the highest ever. And the total number of individuals? From end-to-end and side-to-side, we counted 6255 birds (subject to recount). Even

when you subtract a thousand starlings, the total far exceeds all previous years.

Birds seen within the week but not on the day are also tabulated. Sharon Freedman told me she saw a redpoll and a flock of some 2 dozen evening grosbeaks, from Belvedere Castle on Dec. 14, the Thursday before the count. Harold Perloff reported a rusty blackbird at the Upper Lobe, Dec. 14 and 15, bringing the species total for the count period to a whopping 65 birds.

Most of the unusual or rare birds that appear on our counts arrive as 1 or 2 individuals. In the past decade they include: snow goose, tufted duck, Iceland gull, merlin, goshawk, ringed turtle-dove, black-and-white warbler, ovenbird, western tanager, pine siskin, goldfinch, common redpoll, purple finch, evening grosbeak, and dickcissel. I think the reason we are seeing more siskins, goldfinch and redpolls is because the birders are putting out niger thistle seed which attracts them.

Sometimes rare or unusual birds appear as a group. In 1992 a haiku of great blue herons floated through the morning mist to descend before the gaze of charmed watchers. The birds were generous to all, appearing, disappearing and reappearing in many parts of the park.

Some count birds that appear in noticeable numbers are park regulars. They winter here or live here year-round. What is a Christmas Count without cardinals, blue jays, mockingbirds, house sparrows, white-throats, or mourning doves? Actually the number of doves varies greatly. Like gulls they disperse and our high counts happen when someone checks their roosts at day's end.

Other birds appear regularly but in small numbers of about 5 or less. Wrens, kinglets, brown creepers, and some sparrows may be showing us the outer margins of their winter ranges. Stragglers and loners seem to represent a large fraction of many Christmas Bird Counts across America. It would be interesting to know if that fraction has changed much over the century.

## A Decade of Change

In the 10 years I have been totaling the Central Park Count, I am amazed by the great variation in bird populations. Birds that would seem to appear in the same numbers every year turn out to be shifty. Here are 4 groups of birds to give you an idea.

**Ducks:** For sheer numbers, the mallards have it. Except for 1988 when only 89 were counted, mallards always appear in 3-digit numbers with the high in 1995 of 547 individuals. Black ducks appear annually but in much smaller numbers. There were 58 black ducks in 1990, which is encouraging. But the 1995 count tied with 2 others for a low of 13. Shovelers appear most years. In 1994 we counted 94 birds. In 1995, large flocks were here in the fall. But cold weather drove them south and only 4 were here on the big day.

In the 1980's we saw huge populations of ducks. In 1986 there were 275 canvasbacks and 215 lesser scaup. Then came the crash. By the following year there were only 5 of each. Since then, 7 canvasback were counted in 1994 but it's zip for the scaup. The ruddy ducks didn't crash but their decline was mighty steep. There were 149 in 1986, 86 in 1987, and just 4 in 1990. But all is not lost. For this count, their numbers rose to 114. Bufflehead arrive every year in small numbers, usually 5 or less. Wood duck have been appearing since 1990, usually just 1 or 2, but this year we had a glut of 5. Female hooded and common mergansers were both here for the 1995 count. I don't remember 2 species of mergansers before. Now that ponds have been restored to farms in the Midwest, our fall migrant duck populations should grow.

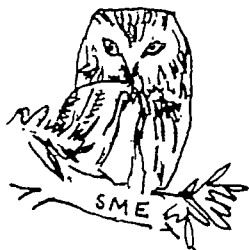
**Raptors:** Hawks are the birds of the year. In this decade the number of red-tailed hawks has

grown from 2 to 15. American Kestrels, counted every year, reached 3 in 1995. There were 4 red-shouldered hawks seen from Castle and the pair of peregrines were counted from the Ramble.

**Woodpeckers:** Woodpeckers are doing well. In 1995 we broke records with 16 flickers, 42 red-bellies, 6 yellow-bellied sapsuckers and 6 count 'em 6 hairy-woodpeckers. There were 32 downy woodpeckers in 1995, down from a high of 55 the year before. Over in the Locust Grove on the western edge of the Great Lawn is one immature red-headed woodpecker. Just now it has only the glint of a red feather or two on the head, but keep watching. The bird will start to be colorful before the winter is out. How nice that all 6 species of woodpeckers appeared for the 1995 count.

**Tree Gleaners:** Black-capped chickadees, which blanketed the park this past fall, moved south when December turned nippy. Still there were 54 counted, the third best total this decade. We also counted 54 white-breasted nuthatches, a marvelous increase over zero the year before. There were 2 brown creepers, not the best but not the worst. And as mentioned, there were an awesome 789 titmice to fill our hearts with gladness.

## Brooding in the Snow



It's certainly been a winter for owls. A barred owl flew into the city and stayed 2 blocks north and east of the park. Alas, this bird did not take up residence in Central Park so that it could be counted. However, 3 saw-whet owls were seen. This one, in Shakespeare Garden, owes a lot to photos by Nate Burkins and Howie Moskowitz. Thanks to Howie also for a photo of the titmouse.

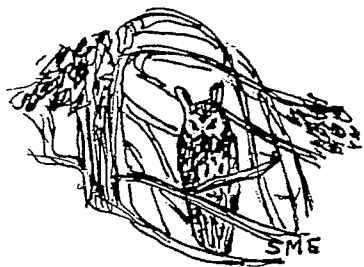
Just before the Blizzard of '96, a great horned owl came into the park. It spent the day in a large tree south of the Gill and east of the Rustic Bridge. The bird's ears were tapered, like smoking candles and the body merged with tree bark. The light improved and a cloak of tans, browns, blacks, and floating grays emerged-- a cape fit for Duse. The bird seemed uninterested in the human watchers creeping about in the snow under it, but very alert to threats from a red-tailed hawk.

That same day, 3 long-eared owls were discovered in a group of evergreens at the base of Cedar Hill. They settled into a small blue spruce. When we arrived, only 2 owls were in the spruce. We looked in vain for the third. A red-tailed hawk landed in the top of an uphill evergreen, looking like a ptarmigan in late-light silhouette. It lifted and flew to a tree near us. Suddenly, the third owl came hurtling out and flapped off.



I returned to sketch the blue spruce, and later, stood under it to capture this view of one of the owls. As I stared up, the owl stared down, then closed its eyes. Clusters of Sunday snow-walkers came by and asked where the owls were. They crunched up slowly, spoke softly, pointed carefully and went away looking pleased.

I will give a **Winter Walk Feb. 18**, snow/sleet date **Feb. 19**. Dress warmly, bring binoculars, and \$7 exact. We meet at **Loeb Boathouse, 10 A.M.**



# THE ELLIOTT NEWSLETTER

## Nature Notes from Central Park

Vol. 2 No. 2

February 1996

### See Amid the Winter Snow

The snow comes flying, falling, drifting, clothing the park in white silence. But the magic doesn't last. Soon sledders and skiers scar the unsullied snow. Park paths turn slush-brown. Snow vistas dwindle to soot-gray patches festooned with litter from humans and dogs. Birders shiver at the feeders and eye the lowering skies for hawks. We are in winter's grip.

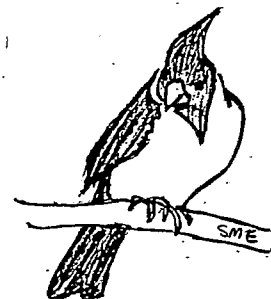
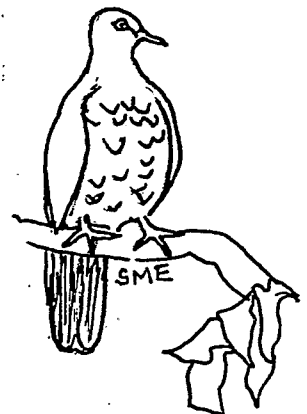
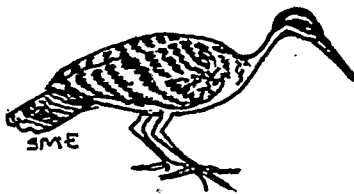
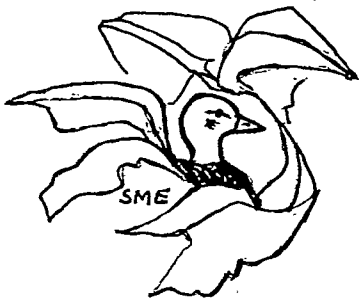
This is the time of year when one's fancy turns to warm places and brilliant colors. And a good way to enjoy a binge in the jungle without leaving the city is to visit the Central Park Zoo. I spent a steamy morning in the Tropical Area building, watching exotic birds from Central and South America, Africa, the Indian Ocean, and Asia. Some of these birds move about on the ground. A few fly and perch just under the roof. But most of them dart through the foliage at mid-story level.

Upper and lower birds are large and fairly easy to see, although the African Pygmy geese *Nettapus auritus* avoid the open stream and peer at you from heavy foliage. The female wears a dirty smudge on her cheek. The male sports a green crown and neck pattern that looks rather like a pageboy hairstyle. Both have dark green backs, rusty sides and white bellies.

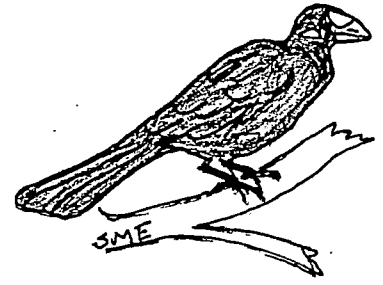
The Central American sunbittern *Eurypyga helias* knows where you are, but spends her time searching the ground for mealy worms. She wears chalk-blue stripes on her head and tail and white dots on her wings. Stripes of earthy black and tan feathers furrow across her back.

High above on an open branch a Mauritius pink pigeon *Columba mayeri* calmly eyes you. The pink feathers look dull, perhaps due to dim light, diet or time of year. Out on Mauritius Island in the Indian Ocean, this 18" pigeon eats fruits which make it unpalatable. Even so, it is almost extinct, like the dodo. There are only 21 left in the wild.

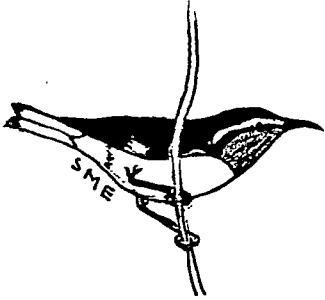
A pair of Red-crested Cardinals *Paroaria coronata* from South America jump out of the shrubbery and land on low branches. These cardinals are gray-backed, with white bellies and bills. Their red heads support a long crest. At half-mast the crest sticks out like a dagger at the back of the head. The shape is repeated with a red, plunging neckline on the chest. The birds look very familiar because escapes brightened the Ramble in 1979 and 1987. In those days we called them Brazilian cardinals and at least 4 birders snapped their pictures, one for a Christmas card.



Violet turacos *Musophaga violacea* live in tree tops of West African forests. The ones in the zoo perch or fly right under the glass roof. They wear dull-blue feathers and the tail looks as long as the body. Unlike other members of their family, they have no crest, but the head is colorful. As I sketched the bird I saw that the female has a yellow dome-plate, a thick, curved, orange-yellow bill, and a white cheek. The male's feathers seem brighter and I think he has some red in his wings.

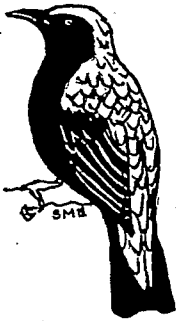


Most of the mid-level birds are fast, wary, and impossible to sketch. There were two exceptions. One was a bananaquit *Coereba flaveola*. This little bird saw me long before I saw it and began coming toward me in short stages.



I stood as still as possible, my gaze bobbing from page to subject as I tried to sketch. Finally the bird jumped on a railing about 4 feet from me. It clearly wanted something from me beside cooing platitudes. Darting into some greenery, it emerged with a short thin vine in its bill, gave me a last long look, and flew off.

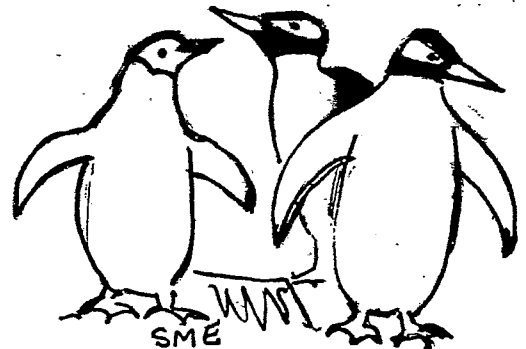
In Central America these birds live on nectar and insects. They have a sweet tooth and will join humans at table for granulated sugar or sugar syrup. It could be that zoo bananaquits see humans as sugar-dispensers and the vine was for the less tasty job of building a nest.



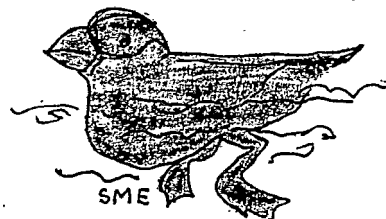
Keith Walker, who is Keeper #3, put out mealy worms, super mealyworms and waxworms for the birds. Some he dribbled on a rock shelf right in front of me. I asked him if the food went to the feisty. No. To the swiftest, some of them quite small. A late arrival was the fairy bluebird *Irena puella*. This 11" bird of Asia wears shiny velvet-blue on the head, shoulders, wings, and tail. In profile it is dazzling. When I began to sketch, the bird faced us for a total eclipse; brilliant blue turned into humdrum black.

Most of the residents in the Tropic Zone House are birds. But there are others, including a Burmese Mountain Tortoise *Geochelone emyds*, which comes from SE Asia and can grow a shell 22" long. A female who has just laid a large cluster of eggs stays near her earth-mound nest. She is joined by the male and the couple couple, looking casual but sedate.

When I left the Tropic Zone House, I couldn't resist a visit to the Penguins Building. There they were, gentoo penguins *Pygoscelis papua* and smaller chinstrap penguins *Pygoscelis antarctica*. Out in the world they live on or near Antarctica. In the zoo they stand on their rock shelf, bright-eyed, staring out in the dark at you. They waddle about, tilting with each step, and hold their flippers away from the body. Some leap into the water and speed back and forth like bubbling torpedoes. After several laps they leap upright from the water and land on their feet. I watched this over and over, marveling at their skill. Every few minutes we were alone together in the room. It was a weekday morning and blessedly uncrowded.



Just around the corner I came face to face with tufted puffins *Fratercula cirrhata* from the Bearing Sea and North Pacific Ocean. These joyous little birds take turns leaping into a bubble stream in their water tank. They paddle their feet and slide backwards along the window, staring at you. When they come to the end of the turbulence, they move off and another little bird slips down the stream. The game reminds me of children on a slide except that the birds take turns without fuss and look as if they were having a good time.



Tufted puffins are usually pictured in full fig. Their mating attire includes a white face, a massive orange-and-yellow bill, and pale yellow tufts or eyebrows that fly out over the back. These zoo birds are gray with lively dark eyes and dull bills. By June they will be in full breeding plumage.

Leaving the zoo, I went to the Arsenal to talk with Dr. Anna Marie Lyles, Associate Curator of Animals for the Central Park Wildlife Center. She said there has been a succession of birds in the Tropic Zone House since they began in 1988. This shuffling and reshuffling is done to find a mix of birds that are calm, not aggressive, and can live in groups. Birds that startle easily and fly in bursts are too excitable for life at the zoo. Feisty birds who enjoy inter-species dustups are also removed. Fussy eaters from special habitats may prove hard to handle. Size and visibility matter. Bigger and territorial birds are restricted to one pair per species. But there may be 3 pairs of little birds that dart through the leaves and are harder to see. Adaptable birds are preferred and necessary. Health is also important. Every new arrival is put in quarantine for at least a month to protect the bird population.

All the birds are captive-bred, not fresh from the wild. The Central Park Wildlife Center is part of a nation-wide cooperative breeding program run by the American Zoo and Aquarium Association. That organization is currently breeding 9 thousand species, most of them endangered. The participants, like Noah's helpers, have just begun to learn how to aid and keep the animals in an Ark for the 21st Century.

Central Park gets 2-3 new species a year and choice of place goes to the more endangered birds. The new arrivals are watched to see how they do and how they adjust to the group. This information is shared with other zoos in the program. Currently the Tropic Zone is being renovated to thin the upper canopy and allow more light to reach the ground. They are trying out new and different ground birds and want to strike a balance with the canopy choices.

I told Dr. Lyles I had slipped in to see the penguins. She said penguins that breed on Antarctica and the Sub-Arctic islands can also breed in the zoo. They lay eggs when they are as young as 5, can breed at 20, and maybe longer. Some zoo birds live to 30 but we don't know if they can breed at that age. Their life span in the wild is 14-15 years. Our current penguin population is 41, and 8 or 9 have been born at the zoo.

Leaving the park, I was delighted to see a small tree on the slope by the steps that lead to Sixth Ave and 59th St. It is a witch-hazel. Witch-hazel or *Hamamelis virginiana*, as the scientific name suggests, is native to North America and grows in the eastern half of our continent. The common name comes from early colonists. Its wavy, asymmetrical leaves reminded them of European hazel trees. "Witch" is an Old English word meaning pliant like a switch, which describes the curving branches.



People cut thicker tree limbs to make V-shaped dowsing rods and grasping each end like handles, strode across the ground looking for gold or water. When the rod dipped to earth they began to dig. Today, the gray tree bark is used to make lotions and ointments that shrink skin, heal cuts, soothe bruises and sprains.

In summer the green fruit turns brown and hard, then explodes. Small seeds shoot out 15 feet from the tree. In November, witch-hazel puts out clusters of yellow flowers with long, twisting petals. Now in February, the flowers look crumpled with cold but their yellow color cheers a gray day. You can see clusters of witch-hazel NE of the Summer House, on slopes between Indian Cave and Stone Arch Bridge and beside the bridle path just below the SW corner of the Reservoir.

When people were naming the witch-hazel, hardwood forests covered the land and squirrels were abundant. The trees were felled and the squirrels shot for meat and fur. Squirrel survivors moved to towns, suburbs, and cities. Since 1900, large numbers live in our park, but how many are here now? To get an idea I asked people on the Christmas Bird Count to also count squirrels. One section was not counted, another undercounted. New counts were made for a total of 341. Not all of them look gray.

About 10 years ago black squirrels began appearing in the park. Ten were counted at Christmas and in January I found 2 "brown" ones (a mix of black and gray). But no matter what color the coat, they are all the same species *Sciurus carolinensis*, or Eastern gray squirrel. They grow 16 to 20 inches long, half of that the tail, and weigh 3/4 to 1 1/2 pounds. Black ones are dark all over. Gray ones have white eye rings and bellies. In summer the gray has a rust wash on sides and feet. A thin tail is used for balance to sit up, run, or leap. They molt in October, shedding old hair and growing a new thicker coat for winter. Winter tails are bushy for wrap-around warmth.

This time of year you will see pairs of squirrels chasing around tree trunks and up into branches. It is the mating season. I saw 2 males pursue a female. She twisted, leapt, and confronted her pursuers, clearly rejecting their attentions. It may be "lady's choice" and only one male will be successful, but in March or April she will probably give birth to 3-5 young. The babies are born naked and blind and nursed by their mother. They begin to grow hair, then open their eyes at about 6 weeks. They peer at the world, venture up and down the tree trunk, eat solid food and are fully furred by 9 weeks. In 2 months they can leave their mother.

Gray squirrels spend most of their time in trees but come down for food. They travel both up and down the trunk head first. High in the trees they build messy nests with a platform of twigs and a mass of dead leaves, dry grass, and shredded bark. Nests are used for nurseries, winter roosts, and a place to store food. Many squirrels make winter nests in a hollow tree and line the hollow with leaves and twigs.

When squirrels don't eat fall nuts, they bury them as a snack for later. Unfound nuts sprout into treelets. Squirrels also eat seeds, flower buds, fungi, bird eggs, and tree bark. They raid bird feeding stations, where they are treated as pests. The reason we have so many here is because they are fed year-round by park visitors. In April, when all the young are born we should have 800 or more.

**Reading Tracks:** Squirrels have large hind legs and feet, small front ones and sharp claws. As they run, the hind feet catch up and get ahead of the front ones. When the prints spread wider and the print groups are farther apart, you know the squirrel was running for dear life.





# THE ELLIOTT NEWSLETTER

## Nature Notes from Central Park

Vol. 2 No. 3

March 1995

### Beware the Ice of March

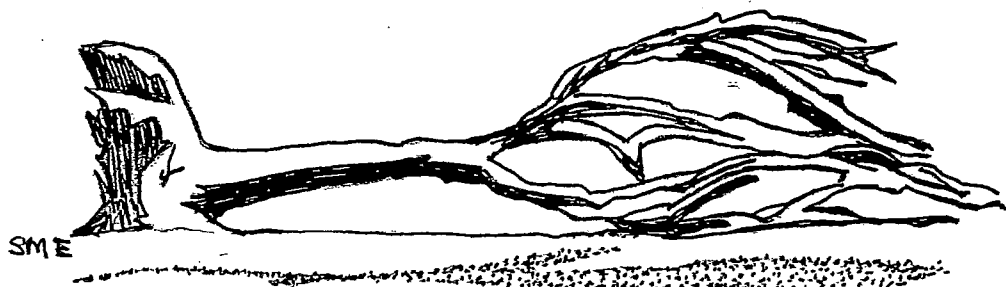
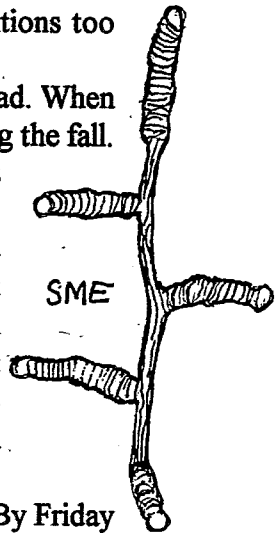
March is always fickle, but this year the month of Mars lived up to its warrior namesake. Beguiled by very warm weather, the trees were coaxed to open their buds and bring forth flowers just before the attack. Then on Thursday morning, March 7, it started to rain. The rain thickened to sleet and the ice began to stick. Soon ice was coating billions of branches. Buds and flowers gathered the sleet, increasing the weight of each limb. For the next 2 hours the ice crust continued to thicken. Trees with wide crowns were at risk. Branches with narrow V-shaped crotches split with ice pressure. Between 2 and 3 PM limbs began to fall. Then, says Neil Calvanese, Director of Horticulture, the ice coating reached a critical mass. By 5 PM whole trees were coming down. As it grew dark, limbs and trunks crashed to earth in the Mall, East Green, Cherry Hill and near the Carousel. A tall tree fell out of the Zoo and onto the 65 St. Transverse. Then a large branch blocked the 79 St. Transverse. By 6 PM New York police closed every transverse in Central Park.

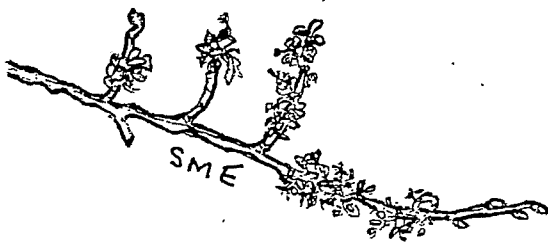
Neil kept staff late and a crew of 10 spread out in trucks. Armed with power saws, they cut big logs into movable hunks and cleared the roads. Sleet changed to snow, which stopped the ice build-up. Neil says that if the ice storm had lasted just 30 minutes more he would have closed the office and gone home. The destruction would have been too great and working conditions too dangerous. Instead, they worked in a growing blanket of snow.

Neil admits he felt uneasy. As he worked he could hear branches creaking overhead. When the strain was too great and a branch gave way, the crack sounded like a gunshot announcing the fall. He was in his office at the 79 St. Yard when he was startled by an explosion. "That was close!" he said. It was a mulberry tree beside Winterdale Arch at 81 St. and the West Drive.

Earlier, one of Neil's men was striding along on his way to the 79 St. Yard. He was on the sidewalk beside the sloping meadow north of the Upper Lobe when he heard a shot and crash behind him. Spinning round, he saw a large bouncing ginkgo branch which had missed him by no more than a foot. Had he been seconds slower, it would have been a direct hit. Four days later I found this branch pulled from the walk. I brought home a bit of it to sketch. When I learned its history I examined the hard knobs on every stalk. If such a weapon fell on you with any force, it could perforate your skull.

They were all lucky. No one was killed and none of the work force was injured. By Friday the crews had cleared the roads and on Saturday they came in to clear the walks. When I arrived on March 11, thousands of small branches were neatly stacked by roads and walks. There were more than enough piles for fifty Birnam Woods. That day I found this toppled American elm in dwindling snow on East Green near the flagpole.

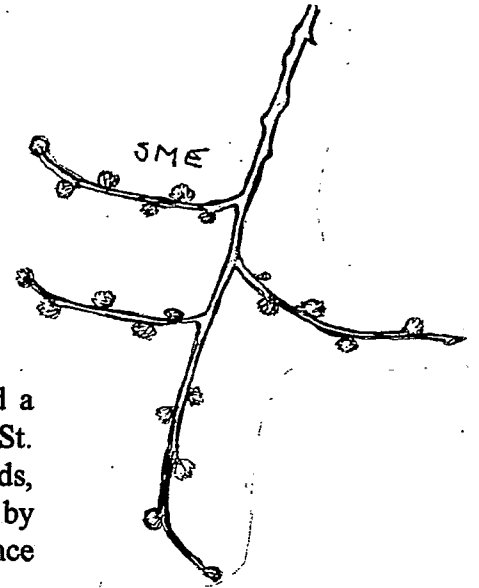




Many American elms took a beating. They have been weakened by decades of Dutch elm disease. Elms have large crowns. As you can see from my sketch, the American elms were well along in flowering. That extra surface made the crown heavy enough to pull trees out by their roots.

Siberian elms have not suffered from Dutch elm disease and their buds, shown here, were only slightly enlarged. Even so, their large crowns were unable to withstand the pressure and branches came tumbling down.

Lorraine Konopka, Assistant Horticulturist for the park, tells me elms and black willows suffered the worst damage. In the Mall a full American elm fell and broke a bench beneath it. Some other Mall elms lost several limbs and one small young elm, a future beauty, lost 4 major limbs--half its crown. A stately elm at 96 St. and Fifth Ave. fell, breaking the park wall and part of the tree behind it.



North of the Band Shell a large, old hawthorne came down and a mulberry with an attractive low limb had that limb cracked off. Across 72 St. on Cherry Hill the victim was a tulip tree. This tree, a favorite of spring birds, lost a long branch as big around as the seat of a barstool. A hackberry over by East Drive and 79 St. lost half its crown. The hackberries in this location once played host to snout butterflies, who lay their eggs on hackberry leaves.

And what of understory trees? Witch hazels have wide open crowns and they are even more open now. In the Pinetum, 3 small pines took a hit, as did the lilac hedge in the South Garden of Conservatory Gardens. Russian olives and privet hedges were badly damaged throughout the park.

Lorraine says 32 trees came down and 32 to 35 trees suffered significant damage. Park trees were pressured by ice from 3 PM Thursday until 3 PM Saturday when it began to melt. Trees that could withstand the burden of ice were done in by 3 inches of snow topping. It was not only their combined weight, says Lorraine, it was all the hours they had to endure it. Many trees have suffered cracks and crown damage. Trees with crowns 50 feet and higher cannot be reached by park machinery. They will have to be climbed by rope and saddle, which is time-consuming and costly.

What a winter! We broke the snow record for our city a week before this ice storm. Our mayor has asked for Federal Disaster Funds because the cost of clearing streets and sidewalks has been so great. In Central Park we will see the effects of the March ice storm for a long time to come. When the leaves come out, leaf load and spring winds will bring down weakened trees and branches. The cost of the cleanup is sure to be more than what's in the budget for tree care. If you want to help our surviving trees, send a check for **Ice Storm / Tree Care** to **Central Park Conservancy, The Arsenal, 830 Fifth Ave., New York, NY 10021**. Tell your friends. Checks are a good way to remember people who loved the park.

## In A Rut

"Mad as a March Hare" is a phrase that has been around for centuries. In about 1390, Chaucer wrote of becoming Mad as a hare in the Friar's Tale. John Haywood put the phrase in his book of Proverbs in 1546, and in 1865, the Cheshire Cat tells Alice that in one direction lies the Hatter and in another the March Hare. "Visit either you like; they're both mad." Alice has seen hatters before and chooses the hare. She thinks that as it is May, the creature won't be as mad as it was in March. She's right.

When Lewis Carroll published the adventures of Alice, mercury was used to cure felt and hatters subjected to mercury poisoning trembled, mumbled, hallucinated and went mad. With hares, the malady is temporary, not progressive. In Europe, March is the rutting season when buck hares perform frenzied capers with giddy recklessness. Their acrobatics certainly succeed with doe hares, and all that wild frolicking captured the attention of humans and became part of our speech.

You won't see a March Hare in Central Park but you may be lucky enough to see the Eastern cottontail *Sylvilagus floridanus*. Like the hare, it has long hind legs and long ears. The ears grow 3 inches long and twist like antennae. The fur is soft and thick, grayish-brown above and white below. The nape of the neck is rust color. Cottontails are named for their fluffy 2-inch tails which are white on the underside. Rabbits have sharp front teeth for cutting and molars for grinding. They chew from side to side because their lower jaws are smaller than the uppers and the molars don't meet.

Cottontails feed in grassy meadows, especially near thickets and tangles that give cover from enemies. They are vegetarians and eat fresh grasses, plantain, clover, dandelion, goldenrod, ragweed, hay, berries and fresh vegetables. In winter they feed on the twigs and branches of sumac, oak, rose, and apples. They void hundreds of droppings each day and recycle the soft ones by swallowing them. Apparently there's more nourishment to be had the second time around.

Cottontails are active from dusk to dawn. In summer you may see them out feeding at midday. Most days they rest in their form, a 5 by 7 inch dent on the surface of the ground shaped to fit the rabbit's body. They move along well-worn trails, used either for visiting their territories or fleeing from enemies. There is usually a dust bath in the territory where they roll to rub off parasites.

In winter, cottontails find a rock crevice, hollow log, or old woodchuck burrow. If the winter home is a burrow, the rabbit remains near the entrance. This seems prudent. If the burrow is in use, the woodchuck may wake up and become testy.

Unlike March hares, cottontails breed in late January or February and breeding continues to September. When a female is coming into estrus she may aggressively fight off males. As she becomes less aggressive, males fight each other to mate with her. The winner chases off his rivals and it is time for the foreplay to begin. According to Donald and Lillian Stokes, the buck dashes to the side of the doe and sprays her with urine. Surprised, she may groom herself. If he charges her, she jumps in the air and sprays him back as he passes under her. The two continue frisking and pissing until she is ready to mate. He approaches from behind and mounts. As they copulate, she squeals.

Both sexes can and do mate with many different partners. Copulation stimulates the female and triggers ovulation 10 hours after mating. In a month she will give birth to a litter of 4 or 5 young and is ready to mate again. She emits an enticing odor before the young are born and bucks follow her to mate, kicking each other for dominance. Does have 3 or 4 litters a year, an awesome fecundity. But life in the wild is tough and most rabbits live only ½ to 2 years.



The female prepares a nest just before the young are born. She digs a hole about 5 inches wide and 5 inches deep. She lines it with grass and fur from her body. The young are born mostly bald, blind and helpless. They weigh an ounce and are 4 inches long. Their mother covers them with soft nest material and goes to feed nearby, and returns to nurse at night. In less than a week the young have fur and open their eyes. They hop in 10 days and make trips from the nest in 2 weeks. They wander with their mother or each other and are weaned in 4 to 5 weeks. They can breed at 6 months.

## Spring In Shakespeare Garden

Chris Seita is in charge of Shakespeare Garden. She feels about her local cottontails the way Mr. McGregor felt about Peter Rabbit. She resents their dining on spring flowers and summer vegetables. This March we toured the battlefields of contention, starting with grasslike shoots that will flower as Star of Bethlehem *Ornithogalum umbellatum*. Chris says the carpet has been cropped for the past 2 years. We admired sturdy new leaves of lesser celandine, untouched here, says Chris, but a favorite of the pregnant woodchuck in Indian Cave. Rabbits eat primrose *Primula polyanthus*, which have round, ruffled, hairy leaves topped by yellow, pink, red, cream, lavender, or purple flowers. In March the post-winter leaves look like pale, limp spinach and there are no flowers.

SME

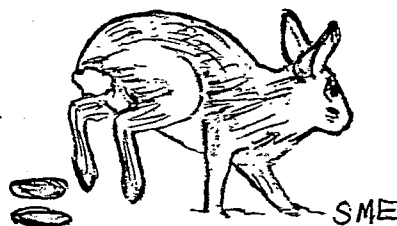
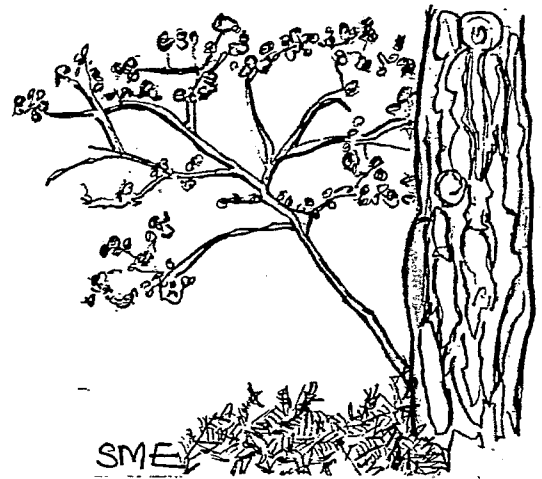
We viewed winter aconite *Eranthis hyemalis* in the center of the garden. It does not do well, says Chris, though probably for other reasons. According to my garden book, these plants are supposed to seed themselves under deciduous trees and thick shady shrubs. In pictures they look like large buttercups with a green ruff around their necks. These winter-swept survivors looked scraggly but determined. Perhaps it is too early for any of these plants to taste good. Chris says that in summer rabbits eat the basil, parsley, carrots, sweet peas, arugula, and lettuce. I am urging her to protect tasty plants with red pepper, mothballs, bone meal, but NOT POISON.

The Lebanese squill are up again on the hill under the mulberry tree. The ultra-violet flowers are newly emerged on very short stems. As yet they are unattended by bees. Chris expected the mulberry tree to fall in the ice storm because it has a large crack. The branches have been wired which may be why the tree still stands.

I asked her if she's seen rabbits this year. Yes, in January and February but not lately. She usually sees them between 7 and 8 AM. We looked at the large, snow-covered rock near the lower sidewalk and I was thrilled to see rabbit tracks. They were noticeably larger than squirrel tracks and without claw marks. The back footprints were aligned but not the front ones. With rabbits, one foot is always in front of the other, probably for balance. When rabbits hop, they put all their weight on their front legs, raise their hind legs and shove them forward in front of the body. These evenly-spaced tracks looked like a tour, not an escape.

We turned around and walked along the wall of the Swedish Cottage to the northwest corner of that building. Looking over the yew hedge, we could see the handsome trunks of Austrian pines. Just north of them is a blooming Asian witch hazel that did not look ice-battered. Asian witch hazels bloom in February and March. Chris has watched the flowers of this slender tree change from pale yellow to burnished gold.

**5 Spring Classes begin Wednesday, April 17, 9 AM at 76 St. and Fifth Ave. Or Sunday, April 21, 9 AM at Loeb Boathouse. To register send \$35 check to me by April 5 at address below.**



# THE ELLIOTT NEWSLETTER

## Nature Notes from Central Park

Vol. 2 No. 4

April 1996

### Oh to Be with Nature Now that April's Here!

On the second day of April the park looked ready for spring. Out on the island of the Meer, the swans were starting a nest--so much safer than last year's nest on Rowboat Lake. Swimming over the Meer were a pair of Canada geese, a pair of buffleheads, various mallards and a pied-billed grebe. I have been told the geese remain but are chased by the swans, who don't believe in double occupancy. Cold and windy, the days seemed more like March than April. The weather reports offered several bouts of snow and ice and I worried for the magnolias. But they were spared. None of the flowers turned brown and some of the trees are still blooming, though most of the cream-and-pink petals carpet the ground.

Great stands of daffodils undulate over the meadows and under the trees. Jostled by boisterous winds, they resist, maintaining a ruffled dignity. In a photo from Charlie Hines, which I used for this sketch, their determination seems palpable. I can almost hear the chanting of William Ernest Henley's "Invictus".

When April begins, many of the avian pleasures were brown. We saw hermit thrushes chased off feeding grounds by their cousins, the robins. Fox sparrows scuffed up the leaves in search of buried insects. It's a pleasure to watch their rust and gray heads, streaked chests and rust tails. One of them rose to a branch and sang at the end of day.

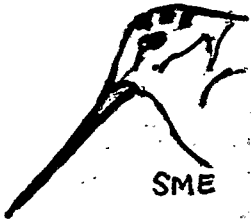
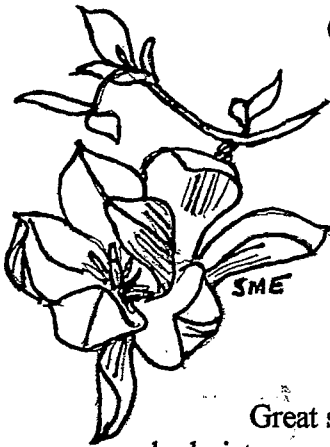
Southwest of the Sour gum tree, we saw a woodcock who spent all day in a patch of leaves. Mostly the bird sat, but once it got to its feet to do its rocking two-step for insects. However, I did not see it eat or fly. A month earlier an injured woodcock was found at the zoo and taken to Vivienne Sokol for rehabilitation. Vivienne says many of the birds injured during migration each year are woodcock. They suffer broken bills, concussions or instant death.

Why so many woodcock crashes? It has to do with the way they are built. Woodcock eyes are set back on the bird's head. Seen side view in bird guides, the eyes don't look unusual. That view is deceiving.

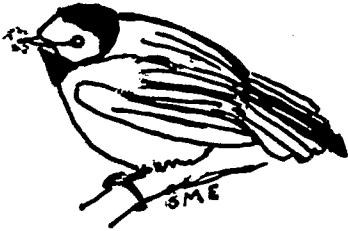
Our bird turned its back and I studied the transverse stripes that ended in a bulge on each side of the head-- like earphones. Suddenly I realized the bulges were eyes, and they were watching us. I shouted to Howie to take the picture. He gave me three-quarter views. They are less unnerving but prove the bird really can look straight back.

If woodcocks have backward vision what can be the advantage? After all, their feathers are perfect camouflage. All that brown, black and tan blends right in with dead leaves. But probing the ground is movement and can be detected. They need to see if a predator is ready to pounce from above or behind. Woodcock eyes are good for ground feeding, terrible for migrating through man-made obstacles.

In the second week of April strong winds south of us must have given startled, small birds the bum's rush. Several alpha males, the scouts of their species, began to appear in the park. As I



struggled with taxes, I heard about pine and palm warblers, the birds we expect in April. But more surprised us.



On April 14, birders were pleased to see a gorgeous hooded warbler, half a month early. It was seen at the Point, Willow Rock, the Gill, and near the Summer House. We chased the bird for quick glimpses and were relieved when it settled down at the Gill just north of Rustic Bridge. The bird was hirsute. Just a small yellow face separated his enormous black beard and hood. As he worked the shore he flashed his tail. From Howie Moskowitz's photos I learned this hooded has 3 white feathers on each side of the tail. But the bird fans and folds them faster than the eye can count.

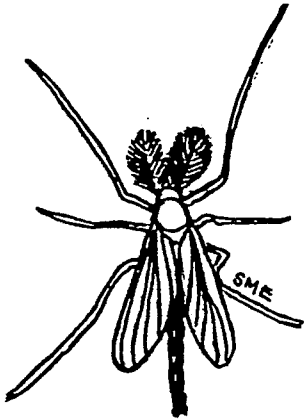
In one of Howie's snaps, I was amazed to see a winged termite or ant in the crevice of a log. But that is not what the bird seemed to be after. He leapt into the air to snatch at very small pale insects swarming over the water, out of the wind. The hooded was joined by winter wrens, a brown creeper, a golden-crowned kinglet and a palm warbler. The wrens poked each other when their paths crossed, but otherwise all the birds were far too busy snaffling bugs to notice anything else.

All that week this location was a center of activity and the hooded was seen there every day. On Thursday I moved along the Gill trying to capture a sample of the insects the birds were eating. As a gnatcatcher I am a failure. I met Nick Wagerik, who demonstrated a successful technique. Instead of flinging a bag at a swarm, you grab at them with your hand and shove the catch into a container. He gave me 2 dead insects and put a live one into a glass vile. We studied this midge with the aid of his loop.

Greatly magnified we could see it had 6 long legs, a thin, glossy-black abdomen and 2 clear iridescent wings. The wings looked golden when they caught the light. On its head it sported a pair of large, feathery antennae, which showed it was a male.

Male midges wear plumed antennae which carry countless scent receptors that detect the female aphrodisiacs or pheromones. Clusters of male midges swarm over the water bouncing up and down or from side to side or, like these insects, swirling with both motions. When females are ready to mate they come to the swarm. They find it a surfeit of riches, too much attention from too many males.

I cannot tell you the common or scientific names of these midges. One of my sources says there are about 200 species of midges in North America. Some of them bite but most don't. If a species of midge bites, female midges do the biting. A blood meal gives their ovaries vital protein for developing young. I watched many birds bite midges but saw no bird act as if the midges returned the favor. The male we saw through Nick's loop wore 2 palps on his head which looked like miniature tusks. Not much larger than this capital O, these midges were the diet of small birds for more than a week. The hooded warbler stayed seven days. When the midges disappeared, he moved to other locations for different snacks.



April weather seems to have affected the flickers. On the 14th we saw 2 stiff-necked males having a silent contest over a female who turned her back on them both. A week later we saw 2 flickers chattering. One spread its yellow tail and cocked the head from side to side. A clear face showed it to be a female. But the other bird was also a female. Perhaps tail-spreading and head-tilting

is threat behavior, not courtship.

Looking at woodpeckers in trees made us aware of the shelf fungus growing from some of them. These are artist fungus which I found last year and Dave Patterson identified. Those were at the base of a tree. The ones we saw this April were high up. Woodpeckers often drill holes beneath them.

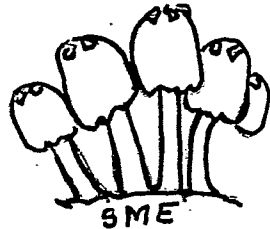
Fungus spores enter a wound in a hardwood tree and produce the gray shelf, flat below and round above. The spores grow down, further weakening the wood. Along come woodpeckers in search of softer places to drill a nest. They place their hole directly beneath the shelf. The new home acquires a front-door roof, handy to keep off the rain, if not to keep off starlings.

On April 21, as we were passing through the flat meadow near the sour gum tree, I pointed to where the woodcock had been. Suddenly Rosanna Chavez bent down and said "Oh look!" There around the stump of a birch tree was a cluster of small button mushrooms. Rosanna told us they are part of a family of inky caps *Coprinus micaceus*. Later she called to spell and pronounce their name as **Ko pri nus mi ca' see us**. One of my guides gives their common name as glistening ink cap. When they are tawny and young their caps are speckled with what look like sugar granules. The round caps turn dark and bell-shaped as they age and split over the center.

These mushrooms are edible when young, but you should check the stem and gills on the underside. Gray-white is O.K. Purple-brown or black is not. As they age, the gills turn black and dissolve to an inky liquid. They are self-destructing by redigesting themselves. Avoid elderly inky caps or their digestive system will give you trouble with yours.

I returned on April 23 to sketch these mushrooms in situ and up close. Unfortunately, someone has come and dug them all out, leaving not one. May their greed be rewarded with indigestion. I borrowed Howie Moskowitz's photos of hooded warbler, and then saw the subject catching bugs around the weather station. At the castle we stood on the rocks and watched an American egret and 2 solitary sandpipers picking their way along the mud flats of the drained pond. We also saw Nick Wagerik and I asked him questions about the midge. Did he think the abdomen was thin like the lead of a pencil or bulbous? Slender. Was it longer than, shorter than, or the same length as the wings? We neither of us remember. My crushed sample looked long, but I could find no wings to compare it with. Looking at illustrations in insect guides they show midges from the side. They are hump-backed, like mosquitoes and the wings seem short. I have used short wings here. If you think this is sloppy observation, we all overlook details. For instance, without looking at the bird or a guide, can you tell the color of the bill and legs of a blue jay, cardinal, robin, hooded warbler? It's a good guessing game, guaranteed to ruin the viewing pleasure for lots of birders this spring.

Nick told us, with nifty gestures, of seeing the double crests on the double-crested cormorants in the Reservoir. Neither of us had ever seen the crests, so after admiring the almost mature red-headed woodpecker in the locust grove, we rushed to the Reservoir. We studied one cormorant carefully as it emerged from the water and saw that it had long, black streamers. The streamers looked like a dripping Fu Manchu mustache. The bird dove again so we looked for another. This bird had black tufts thick as a Fuller brush. I thought they were tilting side-whiskers. But my aim was too low. They are "tufts that curve back from the eye," says the National Geographic Society bird guide. To flaunt your crested eyebrows, you must be a breeding adult. When these birds showed their





profiles, we saw bright orange and blue faces. It was a pleasure to see them so close.

Our quest for that day was the prothonotary warbler, one of 2 discovered the previous Sunday at the 100 St. Pool in willows. We went to the pool to see this needle in a vast haystack of green. After a few minutes I spied 2 birders staring intently into low branches over the water. Sure enough there it was, numbing the mind with pleasure, dazzling the eye. Flashing the gold of the prothonotary, robes of the Pope's scribes, or the deep gold of old eggs, this knowing bird flitted from bug to bug in the willows. Black were its eyes, bill and legs. Violet-gray, as Helene Tetrault once taught me, were the wings. Few birds rival this one for beauty.

If they were a dime a dozen, prothonotary warblers would still delight all but the listers. They are rare. In the south where wrens are uncommon, prothonotaries are abundant and have no trouble building their nests in cavities. Here, wrens are plentiful and feisty; prothonotaries must fight for each niche and nest. Good this one and his kin will succeed. Near the prothonotary we saw a yellow-rumped warbler and a yellow warbler in its orange breast speckles. Down in a stream we discovered a northern waterthrush. A perfect end to a beautiful day.

The next day was less rewarding. Early watchers found 3 yellow-throated warblers, orange-crowned warbler, purple finches, and many more delights. They were all gone by mid-morning. I resented most not seeing the indigo bunting. Migrating buntings feed on Kentucky bluegrass *Poa pretensis*. Usually park mowers cut it before it puts out the first spring seed. But as you scan a vast green expanse, look along a fence or near a rocky outcrop. The cutters don't risk their blades near the rocks so there are seeds for the birds and sightings for you. Look for light patches, they are the seeds. Even if you miss the bunting you can see chipping or field sparrows. There should be more buntings in May.

If you miss the birds of the day, try not to feel glum. Keep telling yourself there are more beauties to come. The day after missing the bunting we saw the orchard oriole. It was a young male in a zig-zag cherry tree just east of the Castle. The breast was lemon yellow and the throat a black rectangle. The only other bird in our park with a black bib is the male house sparrow, so you can certainly tell them apart. Central Park attracts a huge assortment of birds but this year many of them seem to be early.

I have been asked to urge birders to stay on sidewalks this spring. If you are alone that may seem silly. But multiply yourself by 500, which is what was totaled for a day in spring in the '80's. More people come here now. The Ramble looks like a battlefield, hard-packed mud with rain-slicked surface and dwindling grass or bushes. Some efforts are going forward to find out what works for each small area. Take a look at the hill north of Indian Cave and you will see enough stakes to hold soil and stop the joy-riding of dirt bikers. If you curse the bikers and volleyball players, get someone to snap their pictures and call the park police to stop them. Nature lovers use the park in more benign ways but there are so many of us, we really must resist tempting shortcuts. When you see the work crew, thank them for keeping the walks scraped of mud. The walks are better now than in years.



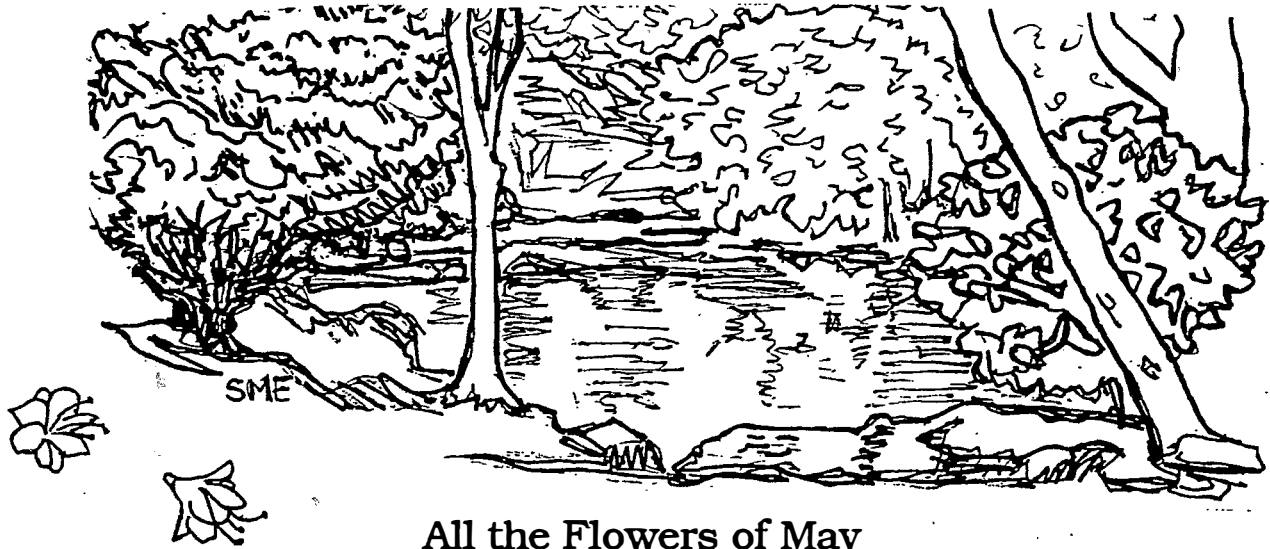


# THE ELLIOTT NEWSLETTER

## Nature Notes from Central Park

Vol. 2 No. 5

May 1996



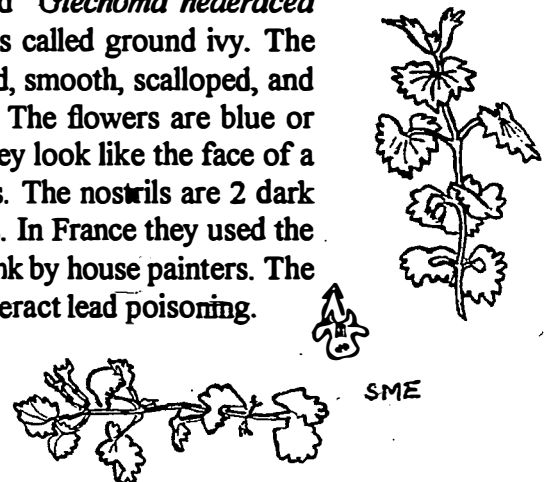
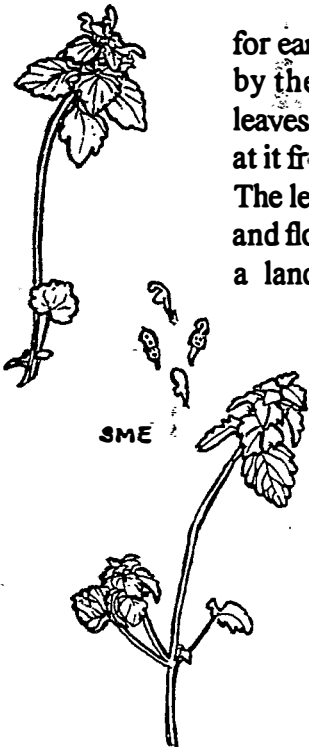
### All the Flowers of May

The largest pool along the course of the Gill in the Ramble is Azalea Pond. It was named for massive bushes of evergreen azaleas that line the shore. These bushes may be more than 100 years old and are some of the oldest plants in the park. All winter their roots have been scraped by sparrows searching out seeds at the winter feeding station.

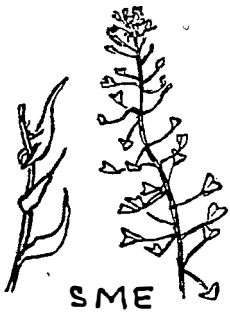
In May their crabbed branches burst forth in a glory of deep fuchsia blooms. Now birders come to the Azalea Pond in hopes of seeing a ruby-throated hummingbird darting in and out of each horned flower. My thanks to Charlie Heinz for a photo to use for this landscape.

In the first days of May we searched waste-places around the Castle and at the Point for early wild flowers. I took home samples of deadnettle twice before I could stop calling it by the wrong name. Deadnettle *Lamium purpureum* is a member of the mint family. The leaves are heart-shaped, rough, toothy, with a purple wash on the upper leaves. If you look at it from above, you will see it bears 4 rows of leaves, one for each side of the square stem. The leaves overlap, like rows of toppled dominoes. The stem is bare between-bursts of leaves and flowers. The little purple flowers have a sheltering hood, deep throat and a lower lip, a landing pad for visiting bees. Deadnettles die back in summer but reappear in the fall.

Like deadnettle, gill-over-the-ground *Glechoma hederacea* comes from Europe. In England this mint is called ground ivy. The leaves are also heart-shaped but more rounded, smooth, scalloped, and grow opposite each other on short stems. The flowers are blue or purple and arranged in clusters. Up close they look like the face of a cow with curly horns, long ears and nostrils. The nostrils are 2 dark spots on the lower lip to direct arriving bees. In France they used the plant to brew beer. In England gill tea was drunk by house painters. The leaves, rich in vitamin C, were used to counteract lead poisoning.

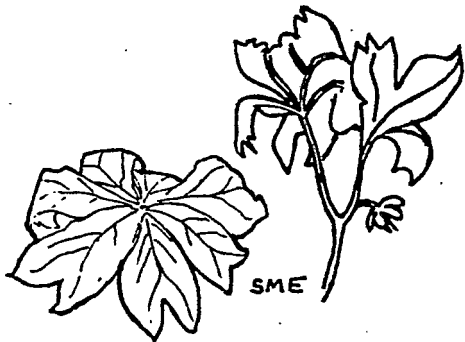
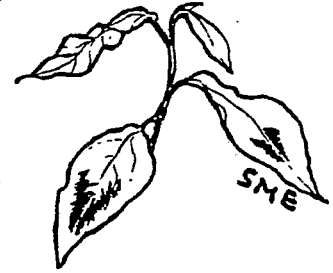


Early in May near the Castle and Weather Station, we saw garlic mustard *Alliaria officinalis*. The tiny white flowers are delicate, the very toothy leaves are triangular, and the long thin pods are erect. Unfortunately this handsome plant smells like garlic.



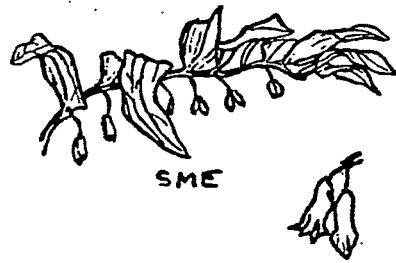
Shepherd's purse *Capsella bursa-pastoris* also has tiny white flowers. They are tightly clustered on top of the stem. Below the flowers leaves grip the stalk, clasping spears. The ones at the base look like dandelion leaves. The seed pods are flat and shaped like the purses of old shepherds. This plant is so successful, one of my sources says it helps itself to other people's property and is called pickpocket.

If you have noticed plants with broad green leaves and wine-red chevrons, they are Virginia knotweed *Tovara virginiana*. The leaves are arranged alternately along the stem and connected to it by tubed sheaths. Soon the chevrons will fade and the plant will put forth small white flowers along the stem. This plant is also called jumpseed. In fall, when the flowers ripen, you will see sparrows jump and grab the stems to shake down seed.

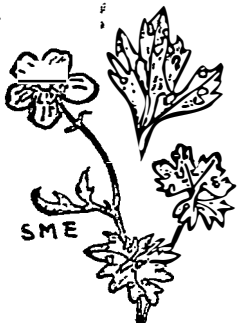


Last spring at the Ladies Pavilion I discovered small green umbrellas growing there. They are May-apple *Podophyllum peltatum*. This May I saw them open to show 2 joined leaves, their fingers reaching for the sky. Attached to the crotch between each pair of leaves is a nodding white flower. They have no nectar but their pollen attracts bees. The flower grows into a lemon-like fruit, ripe in July. Lori Cioffi says fields of May-apples grew near her home. Her family gathered the fruit from which her mother made pie.

Solomon's-seal *Polygonatum biflorum* found at the Ladies Pavilion also grows in Evodia Field. The leaves are arranged alternately along the slender curving stem. Beneath each leaf dangle pairs of young, bell-shaped flowers that look cream-white tipped with green margins. The ones I sketched were turning brown in the heat and sun. Some of the flowers hang singly and I saw one cluster of 3. These plants are named for old-growth marks on their roots which faintly resemble a wax seal. The plants produce black berries in summer.



Scattered over the park are tall buttercups with deeply cut leaves. They are greater celandine *Stylophorum diphyllum*. Some of them begin with light spots in their handsome leaves but as the plants grow taller, the spots disappear. Right now these flowers are about a foot tall. One of my sources calls them celandine-poppy, which will help you separate them from the lesser celandine we saw in April, a member of the ranunculus family.



## Twirling Parchment Seeds

The elms in our park that survived the winter look green and glorious this spring. They are visited by goldfinches, indigo buntings, rose-breasted grosbeaks and orchard orioles for their seeds. Park birders say seeds with pink centers are sweet to eat.

Slippery elms *Ulmus rubra* have large samaras. The seeds are surrounded by papery collars that act as wings. Wide as nickels, long as quarters, they slip through your fingers like money. The samaras grow in thick clusters below leaves. The leaves have a sandpaper surface, hairy underside, and look crumpled. Actually slippery elms are not named for their seeds-- that's just my device to help you remember. They are named for the slimy inner bark of this tree. Pieces of bark were chewed to prevent scurvy or it was ground into flour. Nowadays when vitamin C is common in our diets, we leave the tree to cottontail rabbits and gray squirrels who eat the twigs.



Siberian elms *Ulmus Pamela* come from Asia. They are easy to identify in winter when the buds are spaced just an inch apart on the twig. Unlike the slippery elm, these leaves are narrow, flat with a smooth surface, and the veins not so deeply cut. The seeds are about the same size as the slippery elm but the collar around each seed is much smaller.



American elm *Ulmus Americana* looks like a long-stemmed vase with graceful arching branches. Some of them really look that way despite winter storm and disease. If not thwarted, they can grow 100 feet high. The leaves vary from smooth to rough on the surface, hairy to hairless underneath. The seeds are surrounded by a narrow thin collar that is smooth but with a hairy margin around the edge. There is a round clasp at the top of the seed and the tip splits to become notched. These smallest elm seeds grow on long thread-like stems attached to the twigs. When they break off, the threads remain on the branch.



Dutch elm disease is caused by a fungus carried by elm bark beetles. It spread from Asia to Europe and arrived here early in this century. As the disease moved west it killed thousands of American elms. Now new strains of disease-resistant elms have been developed. Some of these criss-cross breeds have been planted in Central Park. Look for thin trees as tall as a shrub, planted above the Mall between the Band Shell and the 72 St. Transverse. What do the leaves look like? I have been too distracted with birds to know. Pay them a visit and tell me what you discover. Elm leaves are lopsided and toothy. The leaf veins are parallel, like plowed fields.

## Beautiful and Baffling Birds

Last year I wrote of a huge wave day in the spring migration. This year the migration began early. May warblers were here in April. There were gloomy predictions that it would all be over too soon. Instead the migration continued and spread to become a flood. We did not see huge populations of any one species although there were more indigo buntings, 2 or 3 kinds of grosbeak, and enough orchard orioles (maybe 10) to suggest they are moving north. What made this migration special was the enormous variety. There have been more species of birds here at the same time than I ever remember before.

Almost every warbler ever seen here came by this spring. There were enough chats for everyone and when the bay-breasted warblers arrived, both sexes were moving together. I have never seen or heard of so many golden-wings, Brewster's or Lawrence's warblers, all here at once. I asked Rumiko Sugimoto about the Brewster's she saw. She saw 2, one like the guide and one with a yellow throat as well. She said it sang a blue-wing song. I've learned they can sing a blue- or golden-wing song, a mix of both or alternate between them.

The Castle Pond was drained to become the new mudflats for birds. We saw great egrets, black-crowned night heron, solitary sandpipers, and a killdeer. My Sunday group were lucky enough to see a black-billed cuckoo resting on top of bushes. It looked back at us for several minutes while Merrill Higgins took its picture. When it flew, this cuckoo's back and tail were more gray than brown. Later birders reported a black-billed more brown than gray and a yellow-billed cuckoo as well. I don't remember seeing both cuckoos here in the same season.

Konrad Lorenz discovered that young birds will imprint on humans. The Fifth Ave. red-tailed hawks have taught us the reverse is also true. The hawks inspire a loyal following of people who arrive at the model boat pond armed with binoculars and scopes. They come in all kinds of weather to watch and worry about their birds.



This year "pale male" and a new female (an old flame) enlarged the nest at 74 St. It now holds 3 fluffy young. This drawing comes from Merrill Higgins's photos of red-tail with starling. (Good choice of prey!) He reports watching pale male arrive with a starling, pluck it, pierce it, and wipe starling along the bills of his young. (Yum!) When he did not feed them, they began to feed themselves. Now they sit up and look out in all directions, alert for returning parents with food.

One day this May I went to the Natural History Museum with photos of a hawk that has puzzled birders for several years. I bumped into 5 former presidents of the Linnaean Society who studied the bird. It was shaggy enough to remind Dean Amadon of the South American *Geranoaetus*. Bob Dickerman, who now sees Southwestern hawks, looked intently and said he had no idea. Dick Sloss and Manny Levine thought it was a buteo and Joe DiCostanzo agreed. Dick got out huge hawk tomes but nothing seemed right. Manny made photocopies and took them home. Later that day, Sharon Freedman noticed feathers between the claws. A goshawk perhaps. That night Manny called. He had also noticed the feathery feet and finally realized it was a male rough-legged hawk. The bird's chocolate chest confused us all but appears clearly in a hawk pamphlet published by the U.S. Department of Fish and Wildlife.



These photos have become our first record of a sit-down rough-legged hawk in the park. They were taken on a winter day near Shakespeare Theatre and the Great Lawn by a non-birder who never knew they would cause such excitement.

## Mysterious Cross-Breeds

Blue-winged warblers are common in Central Park but this May they were almost abundant. Golden-winged warblers are never common and some years we don't see any. These two species winter far apart. But arriving in the North, they find themselves compatible and interbreed.

This May I saw 2, perhaps 3 golden-wings in the park. The first in Strawberry Fields was the most beautiful golden-wing I have ever seen. The entire head and neck were covered with a gold cap. Two rows of yellow wing bars merged to make one wide, brilliant band. An alpha male.

On my next visit to see the golden-wing in the same place I viewed a very different bird. The wing bore only a thin band of gold and there was no color on the head at all, not even the yellow visor worn by females. In somewhat cloudy light, the head looked entirely gray. Because of this bird I went to the American Museum of Natural History to look at prepared skins. There were 67 specimens in the tray, no two alike.

One specimen looked nearly as good as the alpha male in the park. The yellow cap covered the crown from bill to well behind the eye. The wing bars looked like eggs washed with gold. The thick black mask extended farther than the cap. But the throat pattern was incomplete. There were bite-sized gaps on each side. Throat feathers may grow in last.



I studied a vigorously-marked female collected May 15, 1877, in Kalamazoo, Michigan. She wore the yellow visor with an olive-gray crown. Hidden between the dark feathers were several streaks of yellow, too discrete to be seen at any distance. Her wing bars were yellow but oddly arranged. Thin, bright-yellow wing-edgings covered the rump. A long, smoky throat-pattern extended from chest to bill.

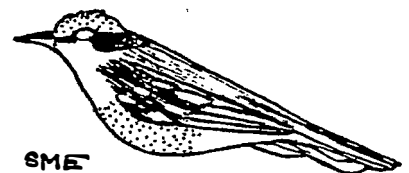


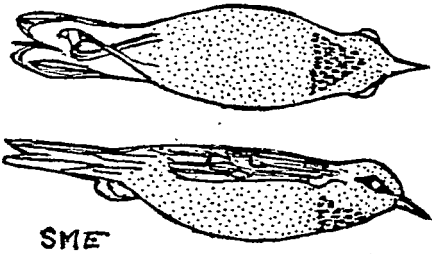
The dullest skin in the tray was collected at Van Courtland Park, June 16, 1925. This drab little specimen is dark olive with a lime wash over head and wings. The emerging face pattern makes the bird look like it has bags under the eyes.



When golden-wings and blue-wings interbreed they produce either a Brewster's or a Lawrence's warbler. More of these hybrids seem to be around, so flipping genes turns out to be a good game. The Lawrence's warbler I saw in the park looked dull with sooty-gray marking at the throat or, as one birder said, a 5 o'clock shadow. I consulted the National Geographic guide and decided it was my first female Lawrence's. At the museum I studied and sketched both hybrids, adding dots to indicate yellow areas. Erasing stray dots, I noticed the bills of all the hybrids were 2-toned, black above and light below.

The prettiest Brewster's in the tray is over 100. It was collected in New Haven, Connecticut, May 17, 1892. The yellow cap extends back to the neck. The black eye marks are thin like a blue-wing in front of the eye but flare like a golden-wing behind the eye. The belly spot is yellow. The bird has large, white wing-dots with a gold wash over some of them. I saw no Brewster's specimen with a yellow throat.





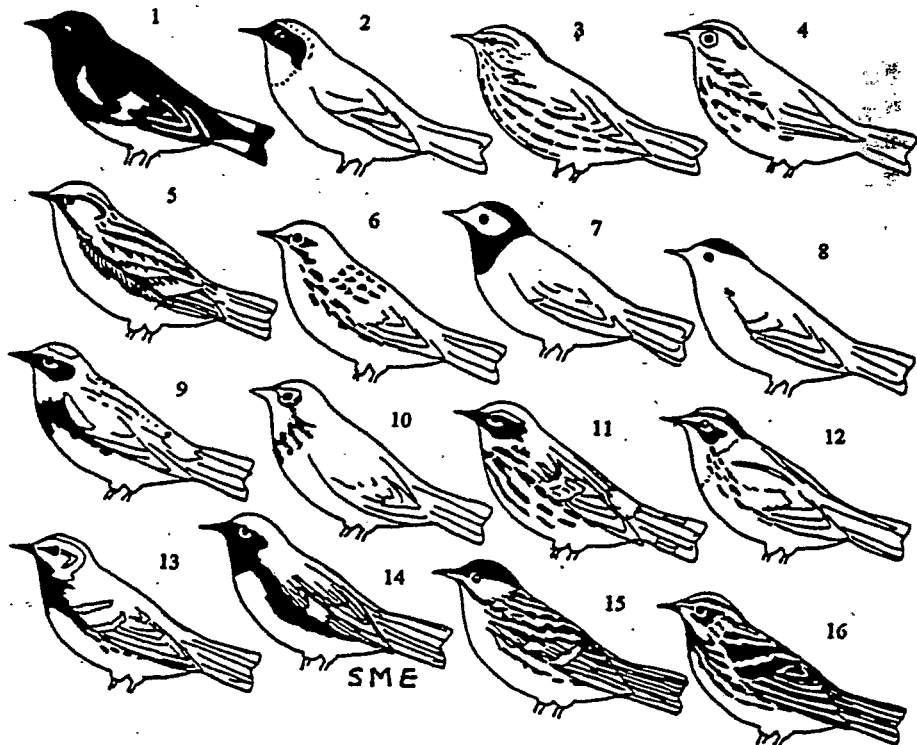
The Lawrence's warbler specimen was collected July 20, 1962 in the museum's former field station near Huntington, Long Island. As I was sketching it from the side and underneath, the throat looked pale. Paul Sweet came into the room, looked, and showed me this first summer male had new throat feathers. Each black feather was tipped with gold. With age, the feather tips get worn down. Thinking it over later, I realized the throat feathers were not fully grown. White separated each of them. Mature feathers touch each other and the throat looks black.

Some years ago I made up a quiz for Wednesday and Sunday classes. The sheet reemerged this spring and I reduced it somewhat and eliminated questions. If you hate quizzes, just skip it.

### The Darling Birds of May

Here are 16 spring warblers, about half the number we can enjoy in Central Park. See if you can identify each male by pattern without color and put the number beside the name in this list. Which of these males wear no yellow in their feathers? Which of their females do?

- a. \_\_\_ American redstart
- b. \_\_\_ black-and-white
- c. \_\_\_ Blackburnian
- d. \_\_\_ blackpoll
- e. \_\_\_ black-throated blue
- f. \_\_\_ black-throated green
- g. \_\_\_ Canada
- h. \_\_\_ chestnut-sided
- i. \_\_\_ common yellowthroat
- j. \_\_\_ hooded
- k. \_\_\_ magnolia
- l. \_\_\_ Northern waterthrush
- m. \_\_\_ ovenbird
- n. \_\_\_ prairie
- o. \_\_\_ Wilson's
- p. \_\_\_ yellow-rumped/ myrtle



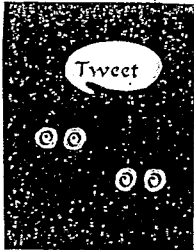
# THE ELLIOTT NEWSLETTER

## Nature Notes from Central Park

Vol. 2 No. 6

June, 1996

### Sing Sing Sing



SME

My friend Jeremy captured my delight when he told me of his teenaged self camping in an English city park with his older brother to tabulate the songs of birds at dawn. They discovered what birds sang first, second, etc. and the minutes and seconds they sang. I decided to try it with the birds in Central Park using a tape recorder. The time keeping is much less precise, but tape avoids writer's cramp and it records the songs if the singers are nearby and sing loud enough.

On the first occasion I arrived at the Boathouse parking lot at 4:15 A.M. and was greeted by a roaring wall of sound, all robins. They soloed for the first hour. So this year I decided to start later. On May 28, I arrived at 59 St. and Sixth Ave. at 4:45 A.M. Under a streetlight I punched buttons and taped a handful of robins singing just over the park wall. Jeff Nulle arrived exactly at 5, reporting house sparrows on the other side of the street. We waited another 15 minutes for others then descended the steps to the 59 St. Pool.

Looking east in gathering light we saw the New York skyline reflected in still water. The air was clear and cool, the place devoid of people and litter. A mallard's quack issued from the water and a wood thrush and red-winged blackbird broke silence nearby. We walked north up an incline to a tree southwest of Wollman Rink. There we listened to a bird singing his song over and over, with a robin chiming in. We heard rapid tripping notes from the non-robin and the word "finch" popped out of my mouth but Jeff thought the song too sweet for a finch. The bird flew east to the Zoo where we could still hear its slow-trill coda.

I recorded crow and catbird and we entered Hallett Sanctuary at 5:30 and added a cardinal delivering at machine gun speed, quacking mallards and the wood thrush quite near by. Jeff heard a grackle, we discussed a mockingbird and watched a pair of totally silent blue jays. Two fish crows were having a lengthy guttural dialogue. I saw one of them above me and looked in vain for a nest while Jeff went off to hear magnolia and redstart warblers.

At 5:45 we watched a black cat out for a stroll. He stopped to look us over then ambled on his way. John Suggs hailed us, entered Hallett and reported hearing a blackpoll. By 6:02 Jeff heard a song sparrow and Kingfisher and I taped the "sweet" call of a starling. John toured the south shore of Hallett along the water and returned to report American redstart, magnolia, common yellowthroat and Canada warblers. He said he heard the "chink" of a Louisiana waterthrush and saw the bird. A surprisingly late bird, no? He also reported a Northern waterthrush (both seen next day in the Ramble) and a green heron. He said he had to leave.

We locked up Hallett and strolled along the sidewalk. The wood thrush scuttled across our path looking furtive. A catbird ran ahead of us and a house sparrow pecked away at something on the walk. A black-crowned night heron swooped over our heads and landed on the sidewalk. We looked across the water to the shore of Hallett and heard some of John's warblers. There was a common yellowthroat and 2 redstarts singing in different pitches. Jeff heard a Canada farther along the shore, too faint for me and the tape machine. A second night heron and a great egret flew in just as we were leaving.

By 6:30 we were at the path west of the Dairy taping a noisy flock of robins, one of them singing from the ground. At the 68 St. transverse Tom Fiore came pedaling up on his bike and apologized for not setting his alarm. As we strolled north between the Mall and Sheep Meadow I told Tom about our sweet-sounding-finch-like mystery bird. He suggested I try listening to tapes of orchard oriole. At 6:40 we reached the Bandshell where I looked over the new elms. They are taller than I told you in the May newsletter. Some of the leaves sported insect galls.

We crossed the 72 St. transverse to Cherry Hill and heard a mourning dove and a thrush singing “Da-ah de-ah”, the call of the Swainson’s. Usually we don’t hear these birds sing as they migrate, but many birders have heard the late ones singing this spring. We heard orioles chatter and sing and Jeff heard a red-belly, our first woodpecker of the day. At waterside willows we watched and heard yellow-rumps, a parula, Wilson’s, and yellow warbler.

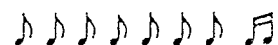
Tom said he heard an indigo bunting behind us. We returned to the top of the hill and stood on the Birder’s Bleachers, that Ice Age rocky outcrop just west of the cut-leaf beech. Now we could hear the bunting more clearly. We circled the tree for better sound but poor visibility. Suddenly the bird turned slightly and we could see a gray shade of its beautiful blue body.

Near the yellow Japanese roses (shrubs that are neither Japanese nor roses) we saw a male and female cowbird. Zounds! He produced a rusty-hinge squeak and she waddled after him. We crossed Bow Bridge, and entered the Ramble to see a silent scarlet tanager. We walked up on a common yellowthroat with an odd song and heard a woodpecker drumming in the distance. At the Weather Station we heard the house wren that was there for several weeks. He sounded halfhearted and we thought he might have no mate.

Walking east from Belvedere Castle we looked out on mudflats and saw a white-crowned sparrow in the grass and a black-crowned night heron lumping in the mud. Rough-winged swallows were darting hither and thither, but not over water. A backward earth-moving machine chirped loudly at fixed pitch and rhythm. When it paused we heard the nearby robins. They sounded hoarse from trying to yell over it. It was 8 A.M. A good time for a second breakfast.

Later I listened to records of orchard oriole as Tom suggested. The voice quality seemed similar to our mystery singer but not the pattern. One guide likened this oriole’s song to a purple finch. I listened to records of this finch and thought the warble part of the song seemed sweet enough. The slow trill with final notes flipped up or down sounded very like my tape. I counted 7 fast notes before the flip up, 9 fast notes before the flip down. The rhythm matched.

In his Guide to Bird Songs Arestas A. Saunders says that in May and June purple finches have a more regular and definite song of “warbled notes” and a “series of rapid notes all on the same pitch”. Jeff says he now believes we heard a purple finch.



One Saturday morning I heard Scott Simon and Martin Goldsmith do a program about musical pitch on National Public Radio. They explained the difference between perfect pitch and relative pitch and demonstrated both. Two weeks later Scott Simon read letters from the public including one from a man in New York. I found him in the phone book and asked when I called if he was Donald Snyder, the man with perfect pitch. He gave a great shout of laughter and said yes. I explained that I am a bird watcher and wanted to listen to birds with him and record his comments about what he heard. He agreed and we met June 14.

As we strolled beside 100 St. Pool we were accosted by the expletive of a robin. “Sometimes the sound is like a clang tone. If there is not a definite pitch or if there’s a cluster of pitches it’s hard



to pinpoint just one," he said. A cardinal was more forthcoming. "It's an F# and goes down to a B, about an interval of a perfect fifth. The pitches are not definite but slide from one to the other."

As we listened to birds Donald began to make little short humming noises, explaining that to "double check" the sound it helps to be able to reproduce it. On the Great Hill we watched another robin giving a full song and repeating it often. Donald said the bird sang F# down to an F. The song was arranged in 4 groups of 1,2,3, and 1a, he explained. The last group was like the first but the bird trilled up to an E for a different ending.

At the southwest corner of the Meer we heard the one-note call of the oriole and I saw a male shoot out of the trees. Donald hummed the call note and said it sounded like an A. We sat down on a bench near Meer Island and spied 7 mallard ducklings scuttle out of sight. A red-winged blackbird on the path in front of us repeated his piercing one-note calls. Donald listened for quite a while and said it "started on a C and twittered down to about an A, but the pitch trails off to non-musical sound." Eventually the redwing delivered its "con-ger-ee" and flew off.

Several times that morning Donald said something "flew by" so fast he couldn't get it. I thought he meant bird flight, but he was talking about the duration of sound. "Many sounds go by before you can get a fix on the exact pitch. Also, timbre affects the sound. If the timbre is raspy, as with the redwing, that affects how the pitch might be perceived by the ear."

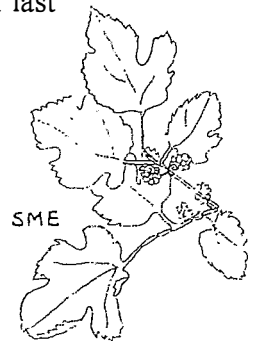
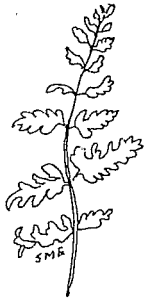
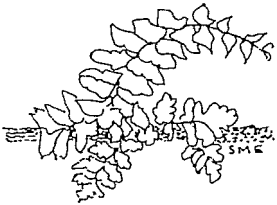
This is the first time Donald has ever listened to bird tones, but not the last. We plan to do it again. Later when I replayed the tape, I checked his notes with a pitch pipe. The match was perfect.

## Pleasures of Sight, Taste and Smell

The wet spring has been kind to wall flowers and ferns. Most of the rehabilitated park walls on Fifth Ave. look depressingly tidy and plantless. But just south of 92 St. I found one ebony spleenwort *Asplenium platyneuron*. At 90 St., Engineers Gate, red mulberries littered the ground and young ebony spleenworts peeped from the cracks in the stone wall. Most were at eye level and hard to sketch with bifocals. But in the next block spleenworts sprouted from the mortar at several levels. With them was one lone fragile fern *Cystopteris fragilis*. In this 2-block rock garden I counted over 200 ferns, many more than last August.

Looking down I found I was treading on white mulberries and went off to find some ripe ones hanging from a tree. I prefer the dark red fruits of *Morus rubra*. They are bumpy and look like long blackberries, but are bland and sweet and lack blackberry tartness. I found a white mulberry tree *Morus alba* near the Castle. As I ate mulberries from low branches robins gobbled them in the branches above me. Even without the fruit, you can tell these trees apart by feeling their leaves. The reds are smooth above and hairy below. The whites are smooth on both sides. Both have oval leaves and leaves with 1 or 2 lobes. The reds are native and the whites come from Asia.

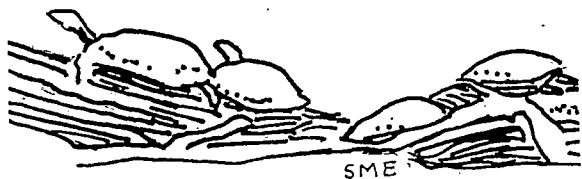
Another tree made glorious by June is the *Catalpa speciosa*. Catalpas put out large long-stemmed heart-shaped leaves that look like lady's fans. The beautiful white flower clusters that clothed the crown fell to earth and look like orchids with ruffles around the throat. There's a large yellow spot on the rim advertizing a landing pad for passing insects. Dotted purple lines direct visitors deep into the throat for the pollen. To inhale the fragrance is to swoon.



## First Family

This spring Turtle Pond was drained to be enlarged and improved. Richard Kruzansky, Soil and Water Body Manager for Central Park Conservancy, waded around in the muck helping the crew to pull out fish and turtles which were removed to other water bodies in the park. He was kind enough to send me an inventory of the turtles who now find themselves in the 72 St. Lake. The census included 18 red-eared sliders, 13 snapping turtles, 3 musk turtles, 2 painted turtles, and 2 cooters. Some of these were born in the park but others were probably secret gifts.

It seems odd to think of our turtles as walking fossils, descended from a family older than the dinosaurs. Today's members are much smaller but the family resemblance is striking-- a head and long neck, 4 scaly legs with claws, a tail, and an upper and lower shell. Turtles can smell, and see well, are sensitive to touch, but have poor hearing. Fresh water turtles have webs between their toes. Males are smaller than females but have longer front claws to stroke her head and neck. If she's willing she strokes his front feet with hers. After they mate, she goes to shore, digs a nest, lays and buries hard leathery eggs. The eggs hatch and out come tiny replicas of the parents. Hatchlings that survive return to the water. Turtles can stay under water because they extract oxygen with gill-like throat linings. Some such as the musk turtle have 2 sacs at the rear which suck in water, extract oxygen and expel the water like a pump. Turtles eat fresh meat such as insects, crayfish, frogs, small turtles, fish and ducklings. They also eat carrion and water plants. Usually they feed under water.



Most park turtles are eastern sliders *Chrysemys scripta*. They are basking turtles that climb out on rocks and logs to take the sun. If approached they slide into the water. Sliders can grow foot-long shells, olive-brown with yellow stripes and bars. Ours have a red stripe behind the eye. This sketch is based on photos by Merrill Higgins.

Painted turtles *Chrysemys picta* also bask in groups but with just 2 it's a small group. The male's shell is flatter than the female's but both are smooth, olive to black with red crescents and bars along the edge. The neck and legs have red streaks. They float with their heads out of water. Cooters *Chrysemys concinna* and *C. floridana* live in the South so the 2 here are exotics. They are basking turtles and their common name comes from Africa.

Musk turtles *Sternotherus odoratus* are small, usually less than five inches. They are also called "stinkpot" because, as their scientific name indicates, when captured they squirt the enemy with something memorable. The head is big with 2 light lines, through and below each eye. The upper shell is high and narrow, the lower shell so small it hardly protects the legs. Despite exposure, they can have long lives. Mating usually goes on under water. The female will lay only 2 to 7 eggs.

Snapping turtles *Chelydra serpentina* are our largest freshwater turtles. Their upper shells reach 20 inches, and can be black or brown. The head is big, the neck and tail long, the jaws powerful scissors. Under water they are not very aggressive but on land they strike and lunge repeatedly. If you try to pick them up they could take off a finger. Snappers spend time on the mud bottom where a courting pair face off and shake heads from side to side. After mating she trundles out on a dark or rainy June day to lay 20 to 30 eggs. Raccoons, crows, herons, and hawks eat the eggs and young.

# THE ELLIOTT NEWSLETTER

## Nature Notes from Central Park

Vol. 2 No. 7

July--August 1996

### Warblers of the Insect World

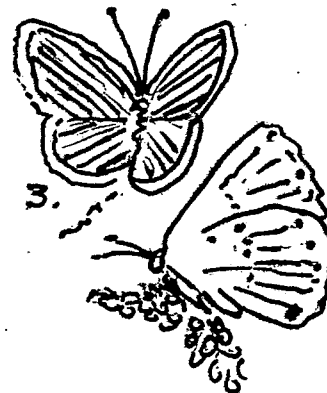
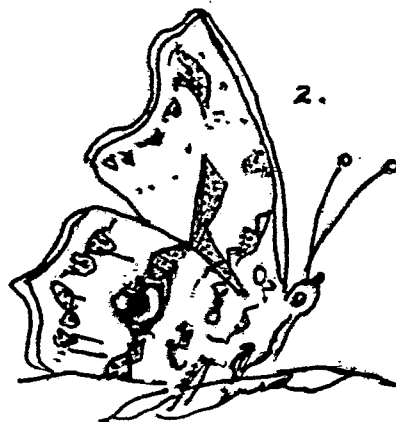
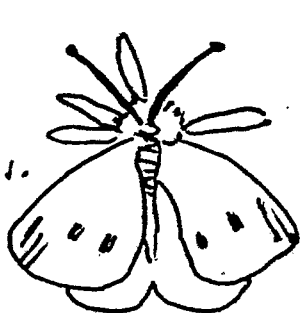
Butterflies are beautiful creatures. They are delightful to watch fluttering in the air or nectaring on plants. The current fad is to count these treasures, and people have been counting butterflies in Central Park for longer than you think. Lambert Pohner made the first count in 1980 for the Xerces Society, an organization named for an extinct butterfly. The following year he gathered a group of us on a dark day and we appeared on the front page of The New York Times lined up in the gloom pretending to see a butterfly. "Hearty Band Counts Butterflies and Blessings" said the caption and the major blessing was that Paul Montgomery was there to report on our doings with wit and charm. Aside from the humans, Jack Manning photographed a cabbage white butterfly. This individual was the *only* butterfly we saw that day!

For the 1995 count the day was warm and sunny and made memorable by the appearance of 2 harvester butterflies, the first ever seen and counted in Central Park. This year the morning was cool, the afternoon warm and overcast. We saw no rare butterflies but one way and another we did manage to see 11 species. Our park is not rich in butterflies, and 11 species is an all-time high.

Over a century ago, cabbage white butterflies (1) came from Europe and entered Canada, perhaps as eggs in bags of grain. Now they have spread across the entire continent. As young caterpillars, they eat mustard plants which make them taste terrible and perhaps render them poisonous. (Think of what mustard does to silver plating.) That is why you don't see birds chasing after our only white butterflies. Some years we count over 100 cabbage whites. This year it was 80.

Orange sulphurs are the same one-inch size but look like bouncing gold dots as they fly over the meadows. When they come to rest you can see a wash of orange on the front wings. This year we counted 9 of them. Tiger swallowtails are also yellow but with black markings. They are noticeably bigger, three inches, and often fly high in and out of the trees. We also saw one each of middle-sized or two-inch butterflies including mourning cloak, American lady, and question mark (2), which is named for the mark on the underside of its wings. We counted three each of the eastern-tailed blue, and the pale, thumbnail-sized spring azure (3).

I was very pleased to see a zabulon skipper (4) in the Evodia Field. These orange and black skippers hold their front wings upright, their hind wings flat. Some years ago I asked Neil Calvanese to let Evodia Field escape the grass mower and protect the habitat of the zabs and other butterflies. Neil agreed. Evodia Field became lush but devoid of zabulon skippers. This year's count brings success at last. My thanks to Tom Fiore and Gaye Fugate for counting the entire park and to Marsha Lowe, Anne Shanahan, Merrill Higgins and Marianne Girards for counting parts of it.



## Fish Watching and Fireflies

On the evening of June 27 we gathered to look at fish in Rowboat Lake. Armed with bread and flashlights we strolled along the shore casting our crumbs upon the water. The fish took the bait but remained invisible. Occasionally we saw a long dark dorsal fin arise then disappear. Just enough to tantalize. Farther out, fish punched water rings in the lake's smooth surface, jiggling last-light reflections. In the reeds near the waterside bird-feeding station we saw a very large bullfrog braving the spotlight but alert for trouble. In a few steps, light covered our path. It was 8:25 and the park streetlights were on.

At Bow Bridge we tossed bread and looked down on nibbling movement. A dark leaf-shape suddenly moved and became a young fish, probably a brown bullhead. Merrill Higgins pointed to a turtle out for a swim. It was a red-eared slider with about a 10" shell. Richard Kruzansky, who had worked in the park all day and was kind enough to join us on his own time, said that the turtles they moved from Turtle Pond had the back edge of their upper shells filed. It is a marking system for future identification. As we watched the water we could hear the eventide songs of robins, redwings, song sparrows, catbirds, and a cardinal trilling fast enough to proclaim a second nesting. Marsha Lowe pointed to the pale sky. We counted a dozen cormorants flying north.

On the south shore and west of the bridge we came upon groups of people fishing. One of them pulled a large-mouth bass out of the water and we got to see its silvery sides and jutting lower jaw before he threw it back. Farther on they admitted they were catching catfish and sunfish but claimed poor English to help us on our way. Standing apart from the fishing lines, we tossed our bread and brought in a female mallard and 3 chicks. They were joined by a male and all the ducks snaffled eagerly.

At the southwest corner of the lake fireflies began to flash in the fading light. Were the flashes yellow or green? Opinions differed. Four people voted for green, one for yellow and 5 people voted for both. Then we thought perhaps the first flash was yellow and the afterglow green. The flashes were single, fairly slow, and all at about the same speed.

Merrill found another bullfrog at the shore south of the Ladies Pavilion. This one was even bigger, maybe 5 inches. Ellis Gellhorn pointed to a small tree, remembering the night heron we had seen there on Bastille Day the year before. She and Anne Shanahan flashed their lights but the tree was empty-- which is probably why we could see the frog.

We watched the rising moon make a path through the water. It was almost a "blue moon", soon to be the second full moon of the month. A big brown bat fluttered its solitary way out over the water and back over the trees. Apparently the best insects were tree-high because the bat did not swoop down to plow the surface of the water.

At Balcony Bridge we saw two ghostly swans watching us from the water. Richard stepped aside for a conversation with Leora Miller whom he knew when she worked for the Rangers. Then he showed us a new snapping turtle nest. The area was fenced in hopes that some of the eggs would hatch and the young return to the water. Discovering this secret place seemed just the right conclusion for our evening. As we walked through the soft night, we agreed it was not much as a fish watch but we had seen many other pleasing sights.

I went on thinking about fireflies and on the day of the butterfly count asked Tom Fiore to catch a couple. I jammed them into a glass vial and later studied them. They were not the same. One looked like the sketch I made for last year's newsletter of the *Protinus pyralis*. This beetle wore yellow margins on the sides and up the center of its shell. The collar had yellow and red sides with

a black dot in the center. The other firefly was smaller. The shell was dull gray-black with no yellow margins. The collar had pale yellow and pinkish red edges with a wide black center. It could be *Lucidota atra* or black firefly, which is found in eastern North America and seems right for size. My specimen is 3/8" or 10mm.

Some sources say fireflies don't eat as adults. Other sources say some of them do. My captives proved both statements are correct. The larger firefly ate in the night and the smaller firefly was eaten. When I looked next morning, most of Blackie's legs seemed to be missing and he was listless. But Peerless looked listless as well. I thought I remembered reading that some fireflies dine on nectar, so I put a dab of honey beside each of mine. Blackie put his head down in it and bit the dust. Peerless sucked up greedily and began to look lively. I put him out on a sill and he vanished, never to be seen again. The corpse of Blackie resides in the refrigerator. I take it out and sigh. I am sorry I don't know his identity for sure and unknowingly subjected him to cannibalism. But I'm glad to know we have 2 species of firefly in Central Park.



## Raptor Report



SME

On July 7, Leonard Soucy and his crew from The Raptor Trust came to Central Park to meet hawk lovers and see the family of red-tailed hawks before they dispersed. Len looked through a telescope and greeted the adult female as "Honey". He knows her of old.

In 1992 she and her mate tried to nest inside the park but were constantly harassed by flocks of crows. Both birds were injured, probably by flying into city skyscrapers as they tried to escape their enemies. Pale Male was knocked unconscious for a day or so, came to and was quickly returned to the park. The female required more rehabilitation and was taken to The Raptor Trust.

Len says he received her on May 3, 1992 with an injured wing. They felt the wing and took an x-ray. The left wing had a dislocated elbow and the bird was given to Dr. Andrew Major, who performed surgery. He sutured and shortened the stretched tendons to hold the wing in place. The hawk was returned to Len and his rehabilitators, where she spent six months to heal, and exercise.

On Nov. 7, 1992 she was reexamined for possible release. Her left wing is "cinched up" says Len, and cannot be fully extended. But she can fly well. The rehabilitation group decided she was "viable" and could cope in the wild. That day she was banded and released. Where she went is a mystery. Pale Male hung around the park near the abandoned nest, then disappeared. He returned with a new mate, a female blind in her right eye. They nested on Fifth Ave. and produced the 1995 family of 3. In the summer the hawks dispersed. The female who lost her eye apparently lost her life as well. She had been banded by Len and the band was returned to him.

This year Pale Male reappeared with his old flame. The reunited couple added to the high-rise nest and again hawk watchers were delighted to see 3 young red-tails grow to adults. But where was this female last year? Len says it's about 20 miles from The Raptor Trust to Central Park as the hawk flies. She could accomplish this trip in hours, or several days if she dallied. Perhaps she also found and lost a mate and this year's pair are widow and widower. We are told that hawks mate for life, or the life of the mate. We know very little about separated and reunited pairs. It will be interesting to see who shows up for next year's nest.

If you wish to visit or donate to The Raptor Trust, they are at 1390 White Bridge Road, Millington, NJ 07946, phone 908-647-2353. They have an old female golden eagle with a missing wing and a new golden eagle male. Just think what that could lead to!



SME



## Summer in the Meadow

The sloping wildflower meadow east of the Loch at the north end of the park is full of good things to see. I went there to meet Dennis Burton, Woodlands Manager for Central Park. While I waited I sketched a purple coneflower *Echinacea purpurea*, which is a big flower with a high center and purple-red petals that curve down and out. This plant grows to 3 feet and as I watched, attracted 2 bees and an orange sulphur butterfly. A yellow coneflower named for its dark center is black-eyed Susan *Rudbeckia hirta*. This 3-foot plant is a short member of the sunflower family, says Dennis. Its long stems are topped by big single flowers. I sketched an ox-eye daisy *Chrysanthemum leucanthemum* which was visited by small bees whose back legs looked like yellow pantaloons they were so stuffed with pollen. Daisies have white petals, yellow centers and leaves that seem to strike out in all directions. Red clover *Trifolium pratense* has round-topped flowers that look pink. The leaves are longer and narrower than white clover but both are grouped in 3's and wear chevrons.

Dennis arrived. We discussed the flowers and I told him of seeing various butterflies including a mating pair of pearl crescents and an American lady floating over his gardens. Then we turned to grasses.

The newest arrival in the garden is Indian grass *Sorghastrum nutans*. Dennis vacations in the Catskills and last year brought back seeds. Indian grass grows to 9 feet, is common in tall grass prairie and flowers Aug.-Sept. The head is golden brown, the arms fling wide to flower but are closed before and after.

Next we admired switchgrass *Panicum virgatum*. It grows in thick clumps of long, curved, purple leaves. Four-foot stalks rise from the clump with foot-long heads of purplish flowers. A long, thin leaf on my specimen was green at the base, then wine-spotted turning to solid purple for the rest of its length.

My last sketch was of what Dennis thought was a foxtail. A guide names it *Setaria veridis*. The head nods a little and the long bristle is full of seeds that are eaten by birds.

SME

Late Summer Walk--Insects, Birds and Plants; August 31 or Sept. 1, (Second number rain date). Meet 10 AM at Conservatory Garden, 105 St. and Fifth Ave. Bring \$7 ext. To register, call 212-689-2763 before 9 AM or after 5 PM. (Answering machine is broken.)

Fall Bird Classes--Sundays at 9 AM. Meet at Loeb Boathouse. 5 sessions start Sept. 15

Wednesdays at 9 AM. Meet 76 St. and Fifth Ave. 5 sessions start Sept. 18.

To register, send \$35 check to Sarah Elliott, 333 E. 34 St. NYC 10016. Checks due Sept. 5.

# THE ELLIOTT NEWSLETTER

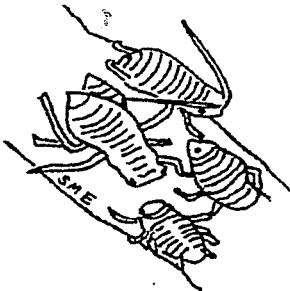
## Nature Notes from Central Park

Vol. 2 No. 8

September 1996

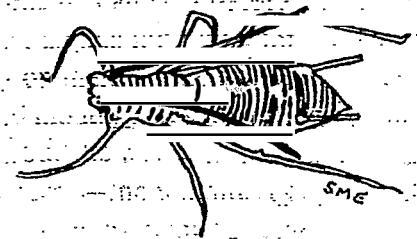
### Late Summer Harvest

At the end of August I visited the Conservatory Garden and met Diane Schaub, who is the Curator of the Garden. We discussed some of the flowers she and the Tuesday volunteers were clipping and pruning, such as melampodion, purple heliotrope, verbena, 4 colors of salvia, white nicotiana (tobacco plant), blue ageratum and helianthus. The last is a plant with thick stem and big daisy-like flowers that have yellow centers and petals. A large sample of helianthus was clipped and brought to Diane for inspection. Swarms of aphids were running up and down the stem, looking like rush hour at Grand Central Station.



The two gardeners said they thought we were looking at green peach, or spinach aphid, which is named for what it eats. These little critters can be green, pink, red, or dark brown. The scientific name for this aphid is *Myzus persicae*, according to Rodale's "Color Handbook of Garden Insects" by Anna Carr. These particular aphids were darker than ones I have seen before so I asked for the helianthus to take with me. The gardeners looked as startled as if I had asked for a leper. They gave me the cutting along with others and I wrapped them in cellophane and tucked them in my bag. A gardener's enemy can be a naturalist's study.

Under enormous magnification, aphids look like potatoes with legs. They are soft-bodied insects that feed on many kinds of plants. They pierce stems, leaves and roots with tube-shaped mouths and suck out the plant's vital juices. However, it's not the take-out but the pump-in that harms the plant host. Aphid saliva breaks down plant pectin--the bonding between cells.



From the aphid's point of view, it takes plenty of plant sap to thrive.

Sap is rich in sugars but poor in amino acids the aphids need. So aphids ingest huge amounts of plant food to get sufficient protein. The food is digested, waste stored in a large rectum and ejected as big liquid bubbles from two rear-end exhaust pipes. The liquid is sticky, sweet, somewhat nutritious and called "honeydew". Honeydew tastes so good that some ants tend and protect aphids like herds of cows just to lick off their backsides.

Aphids have no protection from other insects except fecundity. Nothing can match their birth rate because new generations are born all the time. In warm weather they don't waste time mating, but reproduce asexually. New young aphids develop inside their mothers. At birth they are small but complete and all of them are females. They come out rear first and hit the ground running. Aphids can produce 6 or a dozen generations in a growing season, each female producing hundreds more.

In the fall the days become shorter and cooler and change the quality of food from host plants. The aphids respond and reproduce sexually. Winged aphids appear. These males and females disperse, and find a new location for the winter. They mate and the females lay eggs. Often the eggs are put into the bark or twig buds of trees. In spring there's a tremendous hatch out. New aphids begin to eat in the tree just as migrating birds arrive to eat them. Aphids that escape grow wings and fly to herbaceous plants and crops for summer. Some aphids specialize in certain crops, alternating with specific winter trees. But many aphids are generalists. If they're not near the plant that they

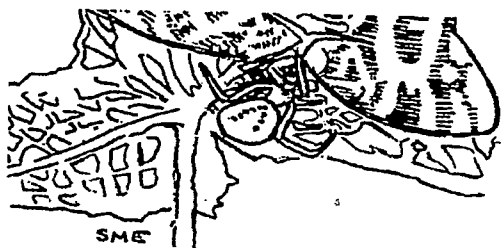
fancy, they fancy the plant they're near.

Leaving the garden I walked west to the grass and wild flower meadow in search of goldenrod spiders. These are one species of a group called crab spiders. They look like crabs and can move sideways and backwards like them.

Crab spiders have flat, chunky bodies and many choose plants or flowers where they blend in with the color scheme. They lie in wait, holding on with two pairs of back legs. Two pairs of front legs are extended and ready to grasp any insects who come within reach.

Goldenrod spiders *Misumena vatia* can alter their color to suit the flower. They are slow-changing chameleons, turning from white to yellow and back again in several days, or several weeks. Crab spiders have 8 beady little eyes in 2 rows, see well, and strike fast. Below the eyes are a pair of fangs to bite and inject venom. When a bee, wasp, ant or butterfly comes to inspect the flower, the spider sidles up, leaps and bites. Almost before it knows what happened, the insect is paralyzed and its internal organs turned to soup. Crab spiders use their fangs as straws to suck out their meal. When only a hollow shell of the insect is left, it is tossed off the plant.

In the meadow I peered into daisies, goldenrods, black-eyed susans and sunflowers but found no spiders. Later, I talked about crab spiders with Merrill Higgins, who found and photographed this goldenrod spider sucking vital juices out of an American lady butterfly at Jamaica Bay. The spider is on the underside of a leaf. You can see the butterfly wings and legs in the air. Its supine body is pinioned by the spider's fangs.

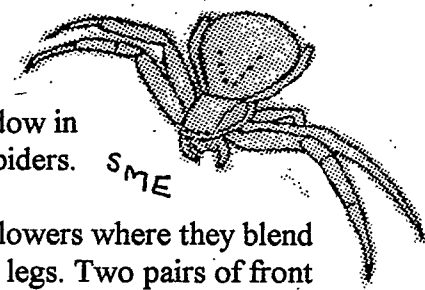
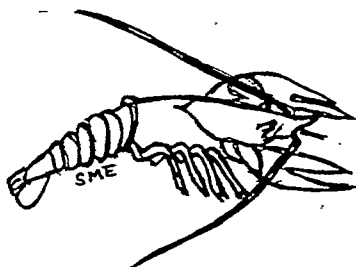
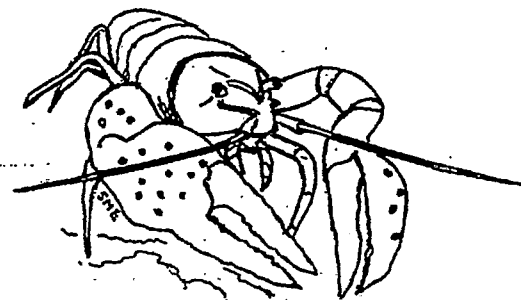


The day of my spider search, a family of red-bellied woodpeckers and a family of flickers were flying and calling at the edge of the meadow. The new red-bellies perched in a dead birch tree. They were so young they had no color on their heads. I have seen photos of white-headed young red-bellies but these were a first in Central Park.

At the base of the meadow is the Loch. Strolling south along the stream, I found 2 boys fishing. Ervert and Lito Thomas are cousins who live in the Bronx but come to Central Park to catch goldfish, bass, and sunfish. On this day they used a shiny metal fish for a lure and they were catching crayfish. They showed me one which slipped away. Then Ervert led me to a bucket where I saw more crayfish than I've ever seen before.

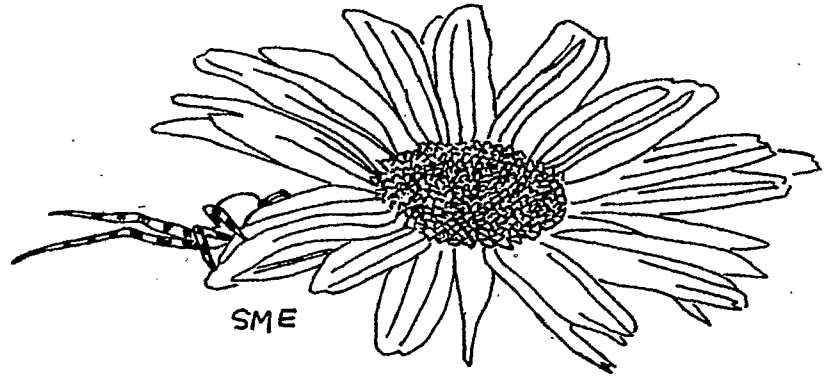
They looked like lobsters and were about 4 ½ inches long, with huge pincers on each front leg, eyes on stalks, and very long feelers. Their armor-plated bodies were dark brownish-black. The first joint of each leg (next to the body) was orange-red and there were orange-red freckles on those fierce claws.

Crayfish are common but secretive. They live in freshwater streams and ponds, hunt at night and may come out on cloudy days. They hide under rocks and wait for passing fish and water insects, and scavenge for dead plants and animals. I asked Ervert Thomas what he and Lito planned to do with their bucket of crayfish. He said throw them back.



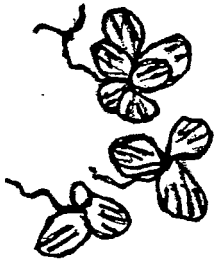


Late that afternoon when I opened the bundle of garden plants, I found an aphid and lifted it up. It seemed crippled on one side, unable to run away. The helianthus whose stem had been swarming with aphids was empty. Out of the cellophane scuttled a very tiny crab spider the size of a pinhead. Some female crab spiders are 1/4 inch, their males half that size.



When I picked up this spider, its pale white body seemed to turn greenish on my fingertip. All the legs were striped like long brown-and-white socks. When I put it down again, the spider scuttled away and was lost. In the flowers, I found some dark, curled specks and a couple of living aphids, one of them with wings. Could this little spider have eaten the rest? If so, soft-bodied aphids made fast food.

Deep into summer the lakes and streams of Central Park wear a blanket of green. Some of this is algae and is scraped off the water by park personnel. But some of it is duckweed, an amazing and primitive plant. People think duckweed is a huge slimy weed. Seen through binoculars, it looks like scattered green confetti. Actually, it is the smallest known flowering plant. The leaves are about the size of this O, or about 1/8 to 3/16 of an inch long. Both male and female flowers are on the same plant, but mostly it seems to reproduce by putting out buds on the leaf margins that grow into new plants.



There are more than a dozen species of duckweed but the kind we see in Central Park is *Lemna minor*. It floats on the surface of the water with threadlike, half-inch, hanging roots. The plant is well named since ducks, especially mallards, eat it. In fall you can see them scything the surface of ponds and pools and soon most of the green disappears.

I brought home a sample in a plastic cup to sketch. It has grown many roots, and small seeds have sunk to the bottom of the cup. In late fall, duckweed seeds and plants will sink and be buried in mud to wait out the winter.

SME

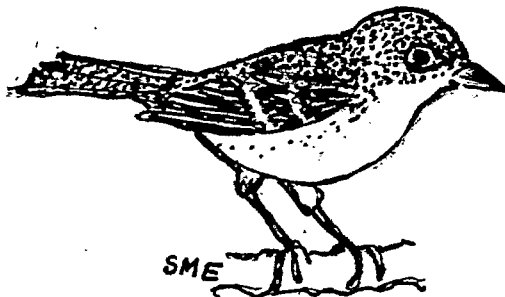


This fall, bird migration in the first half of September was a trickle not a flood, what with a wet summer, warm weather, and storms coming up the coast. Then young, clucking robins and flickers began to arrive in numbers. The robins bathe in the Gill. The flickers are pecking away at ants on Cherry Hill, keeping a wary eye out for roving bands of crows. Young male rose-breasted grosbeaks dart in and out of high trees, looking more like their mothers than fathers. It was a pleasure to see orioles with sunlight streaming through their golden-orange tails. Redstart, magnolia, black-and-white, black-throated blue and common yellowthroat warblers are seen in many places around the park.

On September 18 we saw tree, rough-winged and cliff swallows darting over the Lake in rain and mist. We were on our way to Strawberry Fields to search for a Bell's vireo seen and described by Starr Saphir. We searched for quite a while and finally found a cluster of other birds including a great-crested flycatcher, *Empidonax* flycatcher, Wilson's warbler and something which flew out of a tree and maybe northeast. It was time for lunch so we went our separate ways. I returned in the afternoon, searching for spiders and the vireo. At Strawberry Fields I was joined by Tom Fiore and Tom Flynn and we looked at birds darting through the bushes.

"There it is!" shouted Tom Fiore. We worked hard to see a bird darting here and there. It had a grey head, thin eye-ring, 2 white wing bars, an olive-tan back, and yellow on its flanks and under the tail. Tom said this was the bird he had seen in the willow at the north end of the Upper Lobe. When? About noon. So it flew to the Upper Lobe for lunch and returned to Strawberry Fields for afternoon snacks. At 3:30 PM we chased the bird through bushes and up trees, watching it fan its tail. Tom said he saw the bill from below. It was wide like a vireo and pink at the base.

Later, looking in the National Geographic Guide I saw the bird with what Starr called a pot belly. The bird is confused with others. But the head and neck are certainly less chunky than a ruby-crowned kinglet and it looks more stubby and stout than a white-eyed vireo. Also, I don't remember ever seeing vireos fanning their tails. In "An Audubon Handbook of Western Birds" by John Farrand, Jr. there's a photo of a grayer bird that looks right for shape and stance. The inset of the bird's head shows the fade-away spectacle at the eye and the bubble-gum pink at the base of the bill. In the past, Peter Post has claimed to see Bell's vireo a few times in Central Park but other birders tried to talk him out of it. Some experts say it shouldn't be counted unless it sings. This bird gobbled but never uttered.



Ten years ago, we held a memorial service for **Lambert Pohner** "Falconer of Central Park". This **October 2** we will remember him again. If you wish to join us, come to the big sour gum or tupelo tree in the flat meadow south of the Castle. We will gather about **11:15 AM**. If you knew him, please bring a piece of lore or funny story to share with us and to burnish his memory. In case of rain we will meet at the Castle.

© 1996 by Sarah McCarn Elliott. All rights reserved. No part of this newsletter may be used or reproduced in any manner whatsoever without written permission. To subscribe for all of 1996 send \$15 check to Sarah M. Elliott, 333 E. 34 St., N.Y.C. 10016. Nature walks for individuals, groups, or organizations call 212-689-2763.

# THE ELLIOTT NEWSLETTER

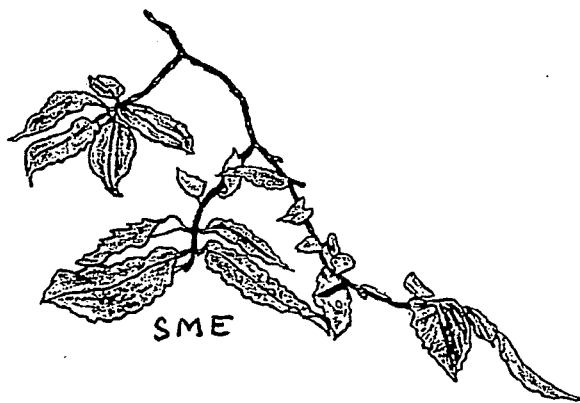
## Nature Notes from Central Park

Vol. 2 No. 9

October 1996

### Behold the Slender Chestnut Tree

In 1995 Norma Collin discovered an American chestnut tree at the western edge of the Gill near the Rustic Bridge. You'll see it if you stand on the bridge and look south with a plaque, dedicated to the memory of Timothy Laupot, 1978, beside your right foot. Look out and you will see the dark trunk of a large, black cherry tree directly in front of you. There is a sidewalk to the left of the tree. To the right of it and closer to you is a skinny tree on a rise covered by wood aster. It is the one you have come to see. Notice the long, thin leaves. They are enormous and look too big for the tree. May Theilgaard Watts in Master Tree Finder says that "if the leaf is canoe shaped with a short stem, it is a chestnut *Castanea dentata*".

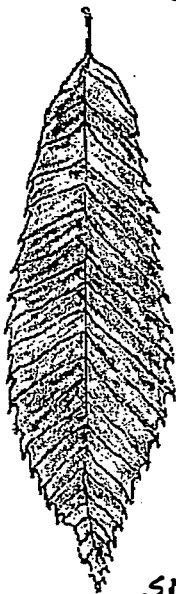


I pointed out Norma's discovery to a Sunday group of birders, probably a first-ever sighting for all of us. They told me about Anne Raver's article on chestnuts in the September 15 issue of "The New York Times". It is full of interesting information and inspired me to learn more about our tree. I called Neil Calvanese to find out how many more American chestnut trees we have in the park. He thought we don't have any.

Once chestnut trees covered the land from Maine south to Tennessee and west to Michigan. Then, at the turn of the century, an orange fungus came into the country on chestnuts from Asia. Asian chestnut trees were immune to the fungus, but for American chestnuts the fungus proved fatal. In 1904, chestnut blight was discovered in New York City. Blight spread to New England, the Allegheny Mountains and into the southern Appalachians, killing, says Raver, several billion trees.

In the good old days, chestnut trees grew 100 feet high with trunks 5 to 6 feet across. Indians in central New York called it "O-heh-yah-tah", meaning the prickly husk that covers the sweet nut. In October, the case splits, revealing 1 to 5 nuts inside. The scientific name *dentata* describes the toothy margins of the leaves. The teeth are not zig-zag like a saw, but scalloped like waves racing before the wind. The bark of mature trees is supposed to be gray-brown and deeply cut into broad, flat ridges. The young tree in the park looks tannish-gray. In a photo taken by Susan Fischer, the bark looks smooth and shiny, pulled tight across the surface like a fruit tree.

The day I sketched a branch of our tree I was delighted to bump into Dennis Burton. Turns out he has known about this tree for the past 8 years! We returned to the spot and discovered a dead and rotting viburnum sapling crowding the chestnut. Sapling roots were covered with a ghostly-white growth, striped on the underside like turkey-tails. When I pulled the deadwood away, we saw a damp dent where the viburnum had pressed against its neighbor. Dennis whipped out a knife and scraped the base of the chestnut to allow it to dry, breathe, and grow.



SME

We thought the tree was about 30 feet tall. But later when Wednesday bird watchers visited the tree, Bill Van Dyke stood beside it. With his arm above his head, Bill became an almost-six-foot ruler. We found that the tree is more than  $3\frac{1}{2}$  Van Dykes high, or over 35 feet. Dennis thinks it is nearly 20 years old and should bear fruit in a year or so.

As Anne Raver explains in her "Times" article, people have been cross-breeding Asian and American chestnuts for blight-resistant trees. The young hybrids can resist blight, but may look unfamiliar, more like their Asian ancestors. Dennis believes our slender beauty is all-American, which makes it a botanical miracle.

A few years ago, American chestnut seedlings were put into the North End of the park but succumbed to a drought. This year 60 American Chestnut seedlings were planted in the North Woods and Great Hill. They are 2 years old, 4 to 6 inches high and planted in quart pots. They come from Stokes Forest and the American Chestnut Foundation. The seedlings have strong roots but tender tips. If stepped on, they die. Dennis says if 3 to 5 seedlings survive, we will be lucky. If 10 make it we will be very lucky. These seedlings are not cross-breeds either, so cross your fingers. Chestnut blight is carried on the wind, and the spores can live many years.

What color do chestnut leaves turn in fall? According to Naturalist's Color Guide by Frank B. Smithe, chestnut is a deep red-brown. That color refers to the heartwood of the mature tree. But what color are the leaves? Keep watching.

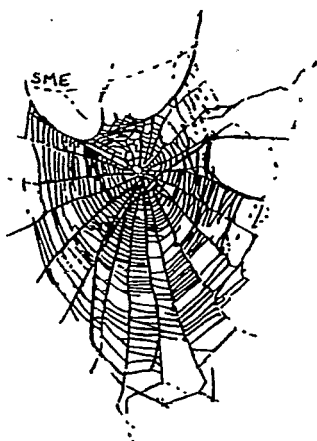
## On the Web

This time of year when mornings are chilly, there's a dew-spangled world when you enter the park. It's a good time to look for spider webs. These small structures are visible when moisture makes them glisten in the sun. Then you can see the intricate detail of spokes and spirals which becomes more astonishing as you study the construction. If you leave without marking the location and return at midday, the web will be invisible, a lost masterpiece.

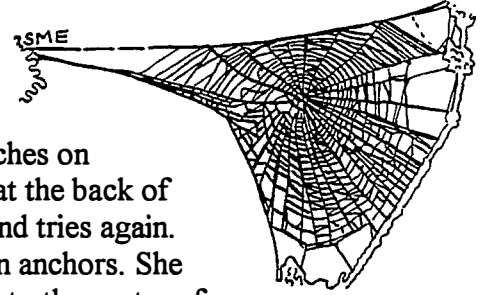
About 1/3 of the world's spiders build round webs hung vertically from supports. They are called orb web weavers and over 200 species of them live in North America. Their webs have the same basic shape; spokes that radiate out from the center and support a circle of silk. Round webs are attached to frames that are rectangles, triangles, or set on a slant. Each species makes a signature pattern for its web. The patterns are as identifiable to an expert as field marks are to a bird watcher.

My web drawings come from wonderful photos taken by Anne Shanahan. I now think the webs were made by the same species of spider because the orbs look similar even though the frames do not. Shadow obliterates some of the web in Anne's photos but I think one of them contained about 25 spokes and the other about 30. The web is long or as long as the frame will allow. The hub is off-center with short spokes above and longer ones below. Over each web is a long, rather thick diagonal line attached near the center. This could be the trap line.

How do orb spiders build their webs? Much faster than you think, considering that the spider is quite small and the web correspondingly vast. It would be comparable to your building an aerial structure long enough to hang above the Great Lawn. In case you care to try for Halloween, here are some hints.



The spider starts with a framework. She climbs to a high point such as a twig or flower and releases a strand of liquid silk. The liquid hardens as soon as it hits the air and wind carries silk thread until it catches on something. If nothing happens, she pays out more silk from spinnerets at the back of her abdomen. If the cast is not successful, she reels in the silk, eats it, and tries again. When the line catches, the spider pulls it tight to make a bridge between anchors. She crosses the bridge, letting out strong lines for reinforcement. Returning to the center of the bridge, she attaches new thread and dangles in air spooling out thread as she drops to a new anchoring point. She makes the thread fast and returns to the hub. The rest of the web will be made by laying out lines and trotting over them. She avoids getting tangled in her construction by tilting her abdomen and holding silk thread aloft with one of her back legs. Unfurled like a banner, the line is high enough to be out of harm's way.



The spider attaches new thread at the hub, climbs to the bridge and turns right. She moves toward the corner, stops, attaches the line and pulls it tight. Moving farther right, she attaches a new line, carries it back across the bridge and down to the hub. She ties this line and pulls it tight. Now there are 2 new spokes in the upper right side of the web. She ties a new line at the hub, drops down and makes 2 more spokes in the lower left side of the web. The spider continues to build spokes, alternating sides to balance the tension of the web. As she works she finds new anchoring points and attaches them with silk for a strong framework.

When the spokes are finished it's time to start the spirals. Beginning at the hub she circles, crossing from spoke to spoke. Tying each intersection she cartwheels her way to the edge. The spirals she makes are wide-spaced scaffolding to hold the web together and give her something to stand on for the return trip.

As she travels inward, the spider lays a narrow-gauge spiral of new silk and rolls up used scaffolding. Working more slowly she crosses every spoke with silk strands which are elastic and sticky. The spider anoints each strand with glue. Then she pulls the strand with the claw of her back foot, and lets the line snap back. This twanging action spreads little drops of glue like beads along the line. The spider goes from spoke to spoke, tying, gluing, and twanging threads as she works her way toward the hub. When the sticky zone is wide enough, some spiders leave a circular space, or free zone. Some spiders bite out the center of the hub and some fill it with a mesh that looks like spaghetti. Last of all the spider makes a long line connecting the web to a retreat where she can rest out of sight. Spiders hold the connecting line with one of their legs.

Orb spiders have a terrific sense of touch, aided by little hairs that sprout from their legs like spines on the arms of a cactus. If something flies into the web they feel it hit and know where it landed. The spider races down the connecting line and leaps upon her prey. Her feet and body sweat a film of oil that protects her from the sticky strands she must travel over. Moths fly in and stick to the glue but can struggle free, leaving their wing scales behind. If her prey is small the spider will pierce it with her fangs, suck out its blood and toss the shell from the web. Larger prey such as wasps, bees, and grasshoppers are stunned and wrapped in a wide bandage of silk. These mummies are carried off to the webside retreat for more leisurely dining.

When insects barrel into a web they leave a hole in the silk. Exposure to air and rain will cause a web to lose its stick. So each night the spider takes the old web out of its frame and eats the remains for needed protein. Then she builds a new one, spinning it in the dark. Running along the spokes and feeling her way across spirals, she will take about one hour to make a new web.



One of the orb web spiders I have taken a fancy to is the garden spider *Araneus diadematus*. Introduced from Europe, it is one of our largest orb weavers. The male reaches ½ inch, the female ¾ inch. When they are young, both sexes make tiny practice webs. When they are adults, only the female builds large orb webs. Their bodies look brownish-orange from a distance and they wear brown stripes on the joints of all 8 legs. They usually hang head down in their webs with the large abdomen above. Magnified, the paunch looks embossed, like a Russian Easter egg. Silvery dots decorate the center with dark bands on either side. Another common name for this orb weaver is “cross spider” and, combining scientific and common names, it carries a diadem of crosses on the abdomen.



This fall my Wednesday bird class was visited by a news photographer from London. We took him to Willow Rock for his picture of choice: birders in bucolic setting with skyscrapers. Unfortunately there were no birds, so we were posed looking at the water. A glistening spot in front of us turned into a wet turtle taking a sunbath. Above it, a spider's web suddenly caught the light. It was triangular. As we watched, something struck the web and the spider came running down her connecting line and nabbed it. She was tannish-yellow and, whatever her name, she made my day.

## Mysterious Migration

This year the fall migration was full of surprises. There was the Bell's vireo at Strawberry Fields, the orange-crowned warbler at the top of the Point, the lesser black-backed gull at the Meer, 5 thousand snow geese seen over the Castle between 5 and 6:30 PM, and an American bittern seen for 2 days near Bow Bridge and the Upper Lobe.

But the general run of birds seemed disappointing. Starr Saphir thought the numbers of warblers, except black-throated blues and magnolias, were down. She saw fewer ruby-crowned kinglets. She reports large numbers of tanagers, rose-breasted grosbeaks, and indigo buntings. But mostly you had to hunt harder for what you found. Often the birds were traveling in little pockets of 5 and 6. Tom Fiore reported thousands of white-throated sparrows for a couple of days in mid-October. He thought the number of waxwings was up and saw more tanagers over the season.

I asked my friend Mary Doherty to watch fall color in Westchester as she commutes to work. She reports some trees have turned yellow, with occasional touches of scarlet, but mostly it looks lush and green because of all the rain and no frost. In fact, Westchester looks like Central Park.

Jeff Nulle reports great numbers of golden-crown kinglets have come into Riverside Park but few are here. A flock of towhees appeared one noon, ate ravenously, were gone next day. At mid month I met David Krauss, in the city for a conference and the park for a break. David now birds in Boston and I asked how the migration had been there. Unexciting. The numbers of birds were down.

Birding is better south of us. Ellis Gellhorn and Starr both report a booming migration at Cape May, NJ. Could these be inland birds flying down the Delaware? No. Cape May hawk watchers say the smaller birds are streaming down the Atlantic coast.

So what's happening? Did the fall birds hopscotch over Boston and New York on their way south? Bird populations should be large because it was such a wet and bountiful summer for nesting. Our cherry, cork, evodia and tupelo trees put out plenty of fruit for hungry travelers. The apples growing in Shakespeare Garden, says Chris Seita, are almost twice the size they were last year. I found one on a path and turned it over. The apple was split in half and tiny ants were running all over it, apparently enjoying a feast. It's good to watch insects when the birds are scarce.

# THE ELLIOTT NEWSLETTER

## Nature Notes from Central Park

Vol. 2 No. 10

November-December 1996

### Fall Garden Show

Every fall there is a great display of chrysanthemums in Conservatory Garden. I went to see it expecting to find some variety of shapes and sizes in shades of purple and white. So I was completely unprepared for the great clamor of color on display. Pale yellow, gold, salmon, fuchsia, pale rust, shell pink and white flowers were crowded together like a pointillist's fantasy. Banks of dancing blooms circled the splashing maidens of the North Garden, their bacchanalia restrained by huge artichokes, standing sentry with leaves waving like saw-toothed scimitars.

The chrysanthemums looked a little tired, a little ragged in the second week of November. But they were still very popular with insects.

I watched a late monarch butterfly and two cabbage whites flutter and dip through the flowers and a clouded sulphur in a sunny spot, half-way round the circle. Hoverflies were everywhere. From a distance their bodies looked like bees, but up close the wings looked like flies. Some of them were large and striped, others were small dark and glossy. There were many bumblebees looking for nectar and even one honeybee.

Among all these insects I found a creature like one I had seen when out searching for spiders in the summer. That one was slate gray. This one was larger, the wings light taupe. I drew a picture of it for Nick Wagarik, saying it looked like a firefly or perhaps a reproductive termite with long gracefully curved wings. The antennae were very long and narrow. Just below the head it wore a circle of orange-gold. Nick said it was a yellow-collared scape moth. Unlike many moths these are active in daylight and have a long season in the sun. I saw them in July and November.

Later I was told the scientific name is *Ctenuchid virginica*. In various guides I found *Ctenucha* and Ctenuchid moths. The pictures were missing or looked wrong and the description didn't seem right either. Then I found a picture and description of a likely moth named *Cisseps fulvicollis*, formerly *Scepsis fulvicollis*. Both family and genus names have changed this century and the species name has remained. But a moth by either name has a ring around the collar.

Despite the problem with scientific names, these moths are interesting. They hang out in meadows. The caterpillars eat grasses, are yellow-tan, hairy and put the hairs into their cocoons. Adults feed on flowers, and visit goldenrod in late summer. They are said to resemble bees or toxic beetles, which protects them from hungry predators. As moths go, they are easy to identify in daylight and willing to let you look at them closely. Next June you will be able to say, "There's the yellow-collared scape moth whose scientific name is such a mess."



The day we viewed chrysanthemums was also a good day to see waterfowl. In the Reservoir we saw 5 shovelers, 7 coot, 1 pied-billed grebe, 12 bufflehead and 4 mallards. Two mute swans were at Conservatory Pond, each with a black foot resting in white feathers out of the water. They were joined by 29 mallards and 1 black duck, all alert for handouts from humans. Now the pond is drained and the birds are gone.

## Remembering Joe Richner

When I entered the park the day before Thanksgiving, it was clear, cold and sunny. I was amazed to see how much fall color still hung about the place. Many leaves were gone from the tall trees around the Great Lawn revealing cross-hatching of pale gray branches. But the lindens still carried their cones of lime leaves. Two pin oaks at Shakespeare Theater added a muted wash of dull yellow and dull lime. The Great Lawn has been carpeted with new turf and looks golf-course perfect. Interspersed, sharp-edged sandy shapes proclaim pristine baseball diamonds. Beside the south shore of Turtle Pond, the gravel layer of a new walkway loops and snakes east and ends at the rocks before the King of Poland statue. The simple grace of this terminal point reminds the viewer of a Japanese landscape. Golden oaks lingered along the 79th St. Transverse, probably retained by the heat of car and bus exhaust. Between the Castle and the Weather Station barberry bushes displayed a range of color from green to apricot to wine red. I descended the long flight of stone steps, and circled the flat meadow, sighing and eyeing the winter remains of the sour gum or tupelo tree. I joined a group of birders and we made our way to the Azalea Pond and a memorial service for Joe Richner.

About 30 birders gathered to remember Joe. We stood beside the benches and under the colorful bird feeders Joe built, as various people said a few words about him. We were joined by Joe's kith and kin including Ignacio Rivero, his step-son, who thanked the birders for the memorial, and Toni Carroll, an actress and close family friend who read a poem to Joe.

Man and boy, Joe spent 7 decades in Central Park. He was a boy when he encountered and fled from the first pair of nesting mute swans. As a man he worked in a railway yard where he bellowed to be heard above the din. That habit of years made him a bane to some, but was a great source of comfort to the hard of hearing.

Bill Gordon, a retired window dresser and avid birder, taught Joe and me to keep people lists. We would jot down identifying field marks and bits of conversation to help us identify the people on our lists. Birders thought it funny but they began to learn each other's names.

Joe became a real lister. In winter he stood in icy winds to list all the ducks and gulls on the Reservoir. He kept daily lists of the people who came to the park, reassuring each that their presence was recorded on the day's roster. Several years ago he became interested in all the dogs that come to the park and learned both breed names and the names of dog owners. We will miss Joe's cheerful greetings, his unfailing good will, and his concern for all the people of the park community.

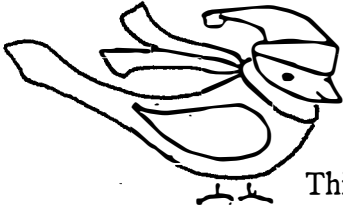
At the gathering, Norma and Murray said the feeders had been up a week but were not being used. Then, just as the memorial was ending, birds began to arrive, helped in part by donations of seed, peanuts and suet in Joe's memory. A downy and red-bellied woodpecker appeared, then a goldfinch, and a white-breasted nuthatch. On the ground rotund gray squirrels and a brave blue jay fought for peanuts. All in all, it was a very satisfying memorial.

## A Devilish Review for Ninety-Six

The following questions can be answered by filling in blanks, marking them true or false, and by circling the correct multiple-choice words. See how many topics you can remember.



1. This November a \_\_\_\_\_ owl appeared in a blue spruce, part of a cluster of evergreens at the base of Cedar Hill, near the 79th St. Transverse. This bird probably roosted there last winter.
2. Aphids taste good to other insects and birds but have no protection from predators. Most of them are female and feed on plants and trees.
3. Crab spiders are named for their disposition and build round webs in goldenrod. Like all spiders, both sexes build the big webs and can change color on the flower.
4. Crayfish are secretive and active at night. They have large claws and their eyes are on stalks.
5. \_\_\_\_\_ is the smallest known flowering plant, named for the birds that eat it and because it spreads rapidly.
6. \_\_\_\_\_ are the most common butterflies in the park and feed on \_\_\_\_\_
7. The question mark butterfly shows field marks on the head, tail, 4 wings, rear under wings.
8. The firefly is a glowworm, butterfly, beetle, hornet.
9. Last year's red-tailed hawks returned to Fifth Ave. this spring. They raised 1, 2, 3, 4, young.
10. Bell's vireo is a common bird in Central Park.
11. In spring \_\_\_\_\_ sing before dawn and after dark.
12. Inky caps are birds, flowers, wasps, mushrooms, fish.
13. Migrating indigo buntings feed on Kentucky bluegrass.
14. There are no Chestnut trees in Central Park. They were wiped out by an ice storm.
15. This past spring, early warblers fed on tiny \_\_\_\_\_ in the air over the Gill.
16. Dennis Burton collected seeds in the Catskills and planted fox tail, red clover, Indian grass.
17. \_\_\_\_\_ are the most common turtles in our park. Snapping turtles lay 2-7 eggs.
18. If you know their black and white patterns, you can identify many colorful warblers.
19. \_\_\_\_\_ are the oldest plants in the Ramble.
20. \_\_\_\_\_ is a mint with rough, heart-shaped leaves, purple flowers and upper leaves.
21. \_\_\_\_\_ is a mint that was put into English tea and French beer.
22. Shepherd's purse is named for the shape of its flowers, seeds, leaves, roots.
23. The green umbrellas of \_\_\_\_\_ hide flowers in spring, fruit in summer.
24. Greater celandine and lesser celandine bloom at the same time and belong to the same family.
25. The spidery flowers of the \_\_\_\_\_ tree appear in fall, stay into winter.
26. Snow tracks with long back feet and small front ones are made by \_\_\_\_\_
27. Tracks with claws marks and aligned front and back feet are made by \_\_\_\_\_
28. You can see bananaquits and fairy bluebirds in Central Park.
29. There have been Christmas counts in Central Park for almost a century.
30. Last Christmas we counted the most species of birds ever recorded for the park.



## Christmas Count

This year's count will be held **December 22**. We meet by the Pumping Station near the southeast corner of the Reservoir at **8 AM**. Eastsiders will gather at 85th and Fifth Ave. at 7:50. Bring paper, pencil, binoculars, bird guide and **\$5 exact** for National Audubon. Wear warm layers, especially on hands and feet. We will divide into teams and spread over the park. At **12:30** we will gather at the **Boathouse** to warm up, buy food, and tabulate the birds. All are welcome.

Here we are at the end of a second year of newsletters, which may seem like quite enough to some of you. However, many of you tell me you want to renew and I have been receiving checks for 1997, some at the '96 price.

Over the past year Jeff Nulle has corrected my copy and photocopied monthly issues of the newsletter. His generosity has meant fewer mistakes in what you read and enormous savings in the cost of production. Jeff says he will continue to proof my copy but the photocopying has come to an end. Last month it cost \$45 to print the newsletter. For 10 issues and extra sheets, for gifts and back issues to late subscribers at higher costs, that will mean over \$500 next year. Add a matching amount for postage, and more for pens, paper, envelopes, labels, computer scanner repair, printer toner kit, transport, research and electricity.

As you may guess from these items, this venture has not made me solvent, let alone rich. It has been a labor of love for which I was glad to break even. But I cannot operate at a loss. So next year the price of the newsletter will be \$20. I hope you will decide to renew and send a check December-January. Some of you may consider this enterprise sufficiently worthwhile to add an outright gift. I will be truly grateful for any donations.

My thanks to Peter Nilsson, who fixed various computer problems during the year, and to Deborah Allen, who helped decode some of the manual instructions. My thanks to Ellis Gellhorn who helped me prepare the mailing and donated handsome envelopes. Thanks to Charlie Heinz, Merrill Higgins, Anne Shanahan, and Howie Moskowitz, who let me use their photos to make drawings. My thanks to Anna Marie Lyles, Niel Calvanese, Lorraine Konopka, Chris Seita, Richard Kruzansky, Diane Schaub, and Dennis Burton. All these people work in Central Park and gave me valuable information for news stories. My thanks to many birders and park regulars for topic suggestions and for newspaper and magazine clippings about nature. My thanks to readers who gave the newsletter to their friends in New York, the Northeast, Midwest, Southwest and West Coast. Finally, my thanks to all the plants and animals whose lives are so important in these surroundings and to Nature lovers across the continent and around the globe.

Best wishes and happy holidays to you all,

*Sarah*