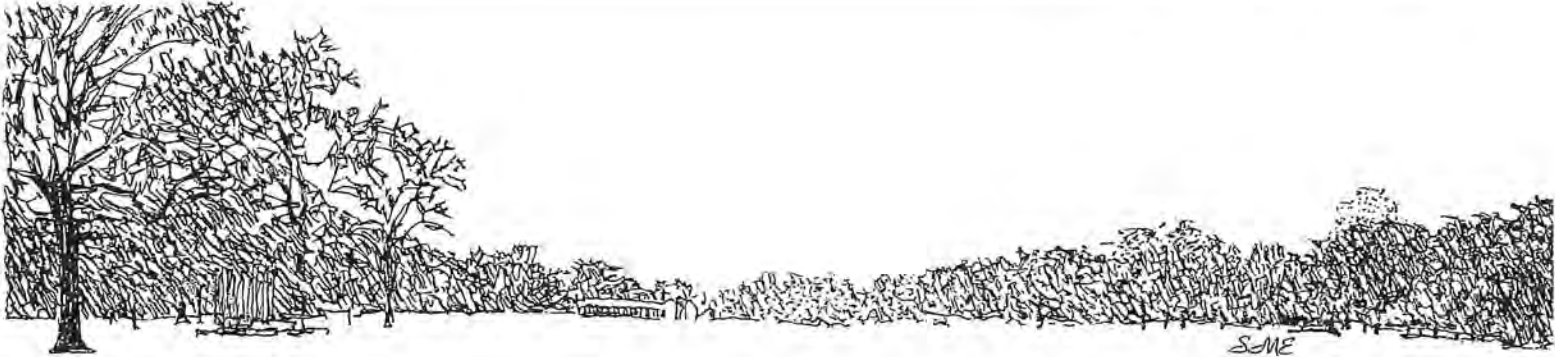


THE ELLIOTT NEWSLETTER

Nature Notes from Central Park

Vol.9 No. 1

January~ February 2003



Heavy Snow for Christmas

The snowfall on Dec. 25-26 was beautiful to look at and fun to walk in, but it caused extensive damage to trees in Central Park. The timing was terrible for the work force who look after those trees and the results were dramatic.

Don McGee, the new Tree Care Supervisor for the park, returned to his Connecticut home after Christmas dinner and listened to an emergency weather report. It had rained from 6 AM until noon, Christmas day and the ground was completely saturated. Then at 1 PM, it began to snow. His phone wasn't working, but he felt sure he'd better go in. He left after midnight and when he got to the Bronx, his phone/pager came to life. There was a message to appear; a tree had fallen at the 86 St. Transverse. Don climbed into a parks pickup truck with a plow, crossed the park at 90 St., moved south on Fifth and entered the 86 St. Transverse. It was blocked and 2 cops were redirecting traffic. Don began phoning, waking people out of a sound sleep, and got 2 workers who came in. They climbed to high ground on the north side of the Transverse and looked at the victim, a white ash. Heavy snow on the branches had proved too much for the roots. After 4 years of drought, the weak roots slipped right out of the rain-soaked ground and the tree fell over on its side. Most of the branches were hanging over the road and Don thought the tree could tip over. So they fired up a chain saw and cut off all branches, letting them fall to the pavement. Next they cut up the trunk and roots. They stacked the wood and cleared the branches from the road. It was 6:30 and the sky was beginning to get light. They had managed to finish just ahead of rush hour.

At 7 AM, a fresh team went out to grind branches into wood chips and collect the stacked wood. Work crews cleared 2 trees at 106 St. and the West Drive and some others near pathways and roads. The damage seemed mild until they looked at the inside landscape of the park. It was bad. Don said the clean-up crews worked flat out. No matter what their rank, everyone did everything.

I called Neil Calvanese, Vice President for Operations, Central Park Conservancy, and made an appointment to see him in his office at the 79 St. Yard. He was out in the field when I arrived which gave me time to admire some marvelous nature sketches on his wall. Some of them were by Eileen Calvanese, Neil's wife, who is a gardener at Battery Park City. She has been taking art classes at the Bronx Botanical Garden and now, says Neil, her nature studies are even better than the stunning work on the walls. It's really nice to hear a husband proud of his wife.

Neil said there was little ice in this storm, a good thing. Ice-coated branches can bend, crack and break off. But plenty of heavy, wet snow collected and hung on the trees and the weight was too much for them. Still, he was surprised by the extent of damage, which was scattered throughout the park. The cherries were hardest hit. Many were black cherries which blew over at the roots. A stand of Yoshino cherries on the east side of the Reservoir snapped at weak spots on their stems. White pines fell in the Pinetum and, north of the Alice in Wonderland statue, a beautiful Japanese pine *Pinus densiflora umbraculifera* was pushed over by snow.

After the storm, some park trees showed fresh cracks. Others fell later. A beautiful red oak beside a walk at the Northwest corner of Wollman Rink crashed a week after the storm. Neil says the diameter of the trunk at breast height (4 ½ feet) measured 42 inches, which makes it about 100 years old. Another loss was a big willow at the 100 St. Pool.

This storm took out 100 trees in our park. Neil calls the tree loss “an opportunity” because it makes new spaces. Woodland crews can replant these spaces with flowering trees, pine trees and over-story trees like oaks. I was told there are 2600 trees in Central Park. Now there are 2500.

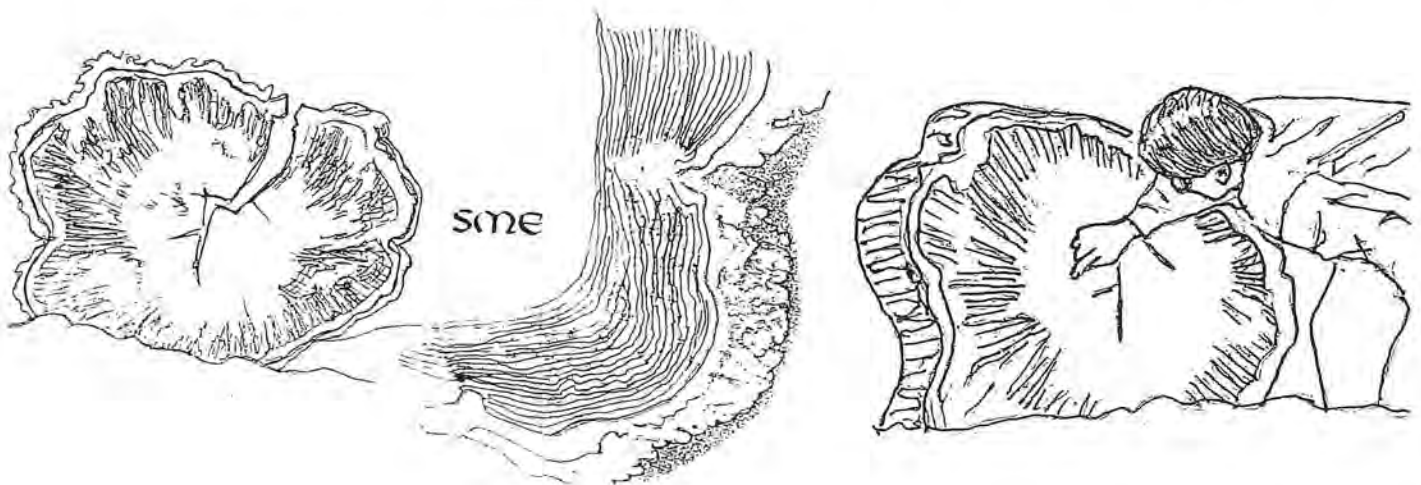
Neil has a collection of tree samples, crosscuts taken from the trunks of downed trees. I admired 2 thin, flat slices resting against his office wall. One, a horse chestnut at East 92 St., was badly cracked and they decided to take it down. The other slice was from a ginko which grew at East 72 St. near Rumsey Playground.

I asked how they count tree rings to find the age of a tree. Neil led me to a thick slab of tree trunk at the back of the 79 St. Yard. This is all that is left of the venerable beech tree that stood at the southwest corner of Cherry Hill. In spring we gathered there on the rock called Birder’s Bleacher and looked into the tree’s sheltering arms. Fluttering birds bounced through the leaves to snaffle insects (fast food for the trip north) while birders shouted out the names of warblers and vireos.

Neil started counting the tree rings, starting at the outside. The rings just inside of the bark were new growth put there last spring and summer. As Neil counted toward the center he moved backwards through time. When he stood up he told me that the tree was about 110 years old, but that he could be more specific after a careful count.

I was surprised to learn that you count tree rings in pairs. In spring rain, many trees grow a wide, porous layer with big cells that give it a light color. In summer, when there is less rain, the cells are smaller, more compressed, and the wood layer is thinner, harder and darker. So you count the light and dark rings as one year of growth. I took snaps of Neil and the tree for sketches. I called to ask why the bark is deeply grooved when beech bark is smooth. Neil explained the cut was made at the base of the tree where the bark is rough.

We had another snow storm for President’s Day, one of the biggest in New York City history. Don McGee told me almost 20 inches fell in Central Park with head-high drifts. Did this storm knock out more trees? Not a tree, said Neil.



Scoop from Central Park

This story came to light after another holiday disaster. On Saturday, Feb. 1, as millions of people were celebrating the Chinese new year of the sheep, the space shuttle broke apart and crashed to earth. Pieces of hardware and 7 astronauts were found scattered over 3 states. The quiet voices of plain folks calling radio and TV stations to tell what they had seen and heard shrank our nation to a community: intimate, sad and surrealistic.

On Monday morning I learned from WNYC Radio that as part of a number of science experiments, pond water from Central Park had been stored in the shuttle and carried aloft. I went through the Sunday NY Times and on page 32 found Don Barry's fascinating article, with a grim headline "The Students: Hopes for Experiments Disappear as Disaster Unfolds." From Australia there was an experiment to see what kind of webs spiders build in space. From Lichtenstein came an experiment to test the social behavior of carpenter bees. From Syracuse, NY there was an experiment using carpenter ants. From Central Park, New York City came muddy pond water for an experiment with magnetic bacteria.

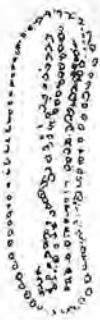
I called the American History of Natural History and eventually talked to Minna Palaquibay, Presenter Educator in the Rose Center for Earth and Space. Minna (pronounced Meena) told me she works with 3rd and 5th grade students in a Saturday program called "The Body in Space." It was Minna who went to Central Park and walked to Rowboat Lake. Somewhere near the Ladies Pavillion, she scooped up muddy water teeming with microorganisms including magnetotactic bacteria.

These bacteria seek places with little or no oxygen. They are so tiny we can't see them except with powerful electron microscopes. Being tiny, they are lightweights-- too light to use the earth's gravity. They can't sink down to get away from harmful oxygen. But they can move forward, using the earth's magnetic field to help them.

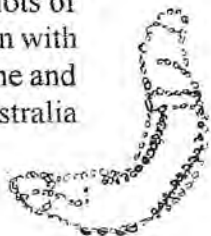
In our hemisphere there's a diagonal magnetic pull towards the North Pole. It makes the bacteria face North and head down. In the Southern Hemisphere the force field is also diagonal but the pull is to the South Pole. The closer you are to either pole, the stronger the diagonal pull. So in places like Australia and New Zealand, magnetic bacteria not only face South, they practically stand on their heads. At the Equator where the pull north, south or diagonal is not strong, they move horizontally in either direction.

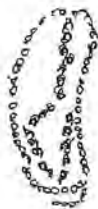
As I learned from the marvelous information Minna sent me, there are many kinds of magnetotactic bacteria. They can live both in marine and fresh water locations if the oxygen supply is poor. Some, like my sketches, are long and thin and remind me of hotdogs. Others are round like pancakes, and still others live in clumps. No matter what their shape, all of them contain tiny magnets, each with a north pole and a south pole. The magnets line up in long strings like batteries in a flashlight. But unlike flashlight batteries, these magnets can all turn in unison--like the Rockettes. A chorus line of mini-magnets acts like a compass needle to keep the bacteria on course.

Unlike ants, bees and spiders, magnetic bacteria have not been known about for very long. They were discovered by Richard P. Blakemoore in 1975 at Wood's Hole, MA. He was studying bacteria and used some marsh mud that had been stored for a while in the lab. He prepared a slide, expecting to see bacteria moving about in all directions. But under the microscope he saw lots of bacteria moving from south to north across the slide. He tried getting them to change direction with no success. Then he put a magnet near the slide and was amazed to see his bacteria turn as one and move away from the magnet. Since then scientists working in North America, Europe and Australia



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have been cutting up strings of little magnets to study their shapes and chemistry. Bacteria-made magnets are so much smaller and more powerful than man-made magnets that scientists and engineers are trying to find new ways to use them.

Not much is known about how these bacteria move in space. They may be confused but Minna thinks they do adapt. However, everything is altered by being in space. When ants, spiders, bacteria and humans return, they come back different. The change, says Minna, remains even after they have readapted to earth's gravity. Eventually, we may learn what space has done to magnetic bacteria and how that will change the technology of our lives. What a pity that besides the people and shuttle, the magnetotactic bacteria from Central Park were lost in space.

Birds of Winter

I told Anne Lazarus I've spent most of this winter indoors working on this newsletter. She decided to tour the park and give me a report. At the Meer she saw a pintail, a common and hooded merganser, a pair of buffleheads, 4-5 ruddies, mallards, black ducks, Canada geese, 2 mute swans and ring-billed gulls. At Conservatory Garden she saw a red-tailed hawk and cardinals. At 103 St she saw a flicker, 2 grackles and white-throats. A young red-tailed hawk with banded tail was at the 100 St. Pool. She saw nothing on the icy Reservoir, but heard 2 "wailing" squirrels with a red-tail near them. She saw white-throats near Tanner Spring and avoided Shakespeare Garden because the paths were too slippery. At Hershhead she saw 1 shoveler, 2 wood ducks and 2 or 3 coots. Mallards and swans were at Balcony Bridge. She headed toward the feeders but the paths were wet, icy and treacherous. So she stood on the pavement at the Azalea Pond and saw house finches, chickadees, gold finches, a tufted titmouse, a red-bellied woodpecker and a downy. On her way to the Zoo she saw blue jays, and a red-winged blackbird. At the Zoo feeders were chipping sparrows and 3 red-tailed hawks. I am grateful to Anne for this February 25 list.

On Feb. 26. I got off the bus, climbed the steps to Belvedere Castle and was stunned as I stepped into a world of white. Ice covered all of Turtle Pond. The surrounding shore and all the Great Lawn glittered with snow. It was bitter cold and the wind cut like a knife. I rushed to the East Drive, rounded the corner into the Ramble and hurried to the feeding station. I was too late for the Wednesday bird feeding crew. They had finished putting out suet and seed and had gone to the Boat House. I followed and, threading my way through extensive interior decoration, found and managed to interview Charles Kennedy and Lee Stinchcomb.

Lee had made 2 new suet feeders, cut out of wire, and brought them in that day. She and Charles said they have been plagued by suet-feeder stealers and have lost 4 of 8 suet feeders in the last 3 weeks. She put a tiny sign on 1 of her new feeders which says, "Whoever steals this risks the curse of the Mummy's Hand. And this means YOU, Rocky." She told me they get their suet from Lobel's at Madison Ave. and 82 St. He is the most expensive butcher in Manhattan but he cuts off meat fat and gives it to her for free. Formerly they used José who worked at Associated Grocery on Columbus between 82-83. He gave them suet for 1 ½ years. Then he was missing and no one in the store seemed to know where he was. Lee continued to ask and eventually found out he had won the lottery and quit his job. After José, they went to Zabar's and Gristedes but the meat scraps were too small. A few good pecks and they fell through the wire holder onto the ground. The butcher at Lobel's told them that these days, most meat comes pre-trimmed and packed. His meat arrives with all the trimmings still on. That day, as a thank-you gift for his superior suet, Lee had given him a copy of "Red Tails in Love." When I asked after our red-tailed hawks I learned that Pale Male and Lola (née Lolita) began mating Jan. 26, the earliest recorded date ever.

THE ELLIOTT NEWSLETTER

Nature Notes from Central Park

Vol.9 No. 2

March~April 2003

Up In Pale Male's Pad

Jim Lewis has been watching the red-tailed hawks on Fifth Ave. for a dozen years and began keeping records in 1995. He put down calendar dates for 1. "Copulation," 2. "Eggs in Nest," 3. "Chick Born, Feeding Begins," 4. "Chick Appears," 5. "First Fledge." In time he could predict events based on previous years' records.

Between mid-January and mid-February birders saw the hawks spinning in the sky, courting and copulating. But the exact date was subjective. You don't know whether you are seeing a first mating or one in a series. Usually, says Jim, mating occurs around Valentine's Day but this year it was very early. Copulation was reported on January 26 by Mike Lovizio. Egg dates are all about the first or second week of March. We see the female looking down into her nest, moving nest material and sitting.

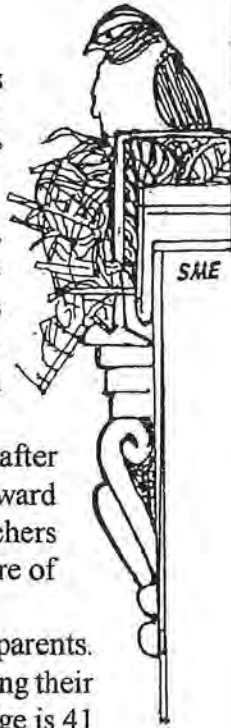
Hatching dates can be as early as April 11 or as late as April 28. A day or two after hatching, the mother can be seen stripping meat off a carcass and then thrusting her head toward specific spots in the nest. In 5 or 6 days the chicks are big enough so that excited hawk watchers can get brief glimpses of fluffy, white heads. As they grow the chicks are more visible more of the time.

The young change from helpless fluff balls to large birds, almost the size of their parents. A couple of weeks before they are ready to fly, they begin bouncing up and down and flapping their wings to strengthen their flight muscles. Jim says the shortest time between hatch and fledge is 41 days, the longest time is 51 days and the average is 47 days.

Usually the nest holds 3 chicks, sometimes, 2 and most of them survive. In 1998, two birds were jumping and flapping their wings when apparently strong wind gusts caught them and blew them out of the nest. Amazingly, they managed to land and live and all the chicks survived. Jim's chart shows that in 1999, the hawks produced 2 chicks. One of them survived and the other died and was taken to Ward Stone, state pathologist. He determined the chick died of Frounce's disease. More people became aware of the effects of this dreadful disease in 2002.

That year both chicks became ill. Swelling was seen near the bill. They didn't eat, flicked their heads and panted for breath. Finally they staggered, toppled over and died. One fell out of the nest. The other chick developed the same symptoms ten days later. It panted, staggered and fell backwards to die in the nest. People who watched the young hawks sicken and fall say the symptoms pointed to Frounce's disease. But Ward Stone never received a hawk body for autopsy.

Frounce's disease is caused by a paramecium named *Trichomonas*. It is highly contagious between birds. The hawk chicks may have gotten it from dining on tainted pigeon. If a chick gets the disease and survives, it has immunity for life. That's why the hawk parents could strip off and feed bad meat to their young and even eat meat scraps themselves without being affected. The female refused to believe her chick was dead. She returned to the nest repeatedly, gripped the fuzzy head and tried to pull the small body upright. Pale Male flew back and forth in front of the nest to intercept and finally, drive her off. This year, with the possible remains of last year's chick at the



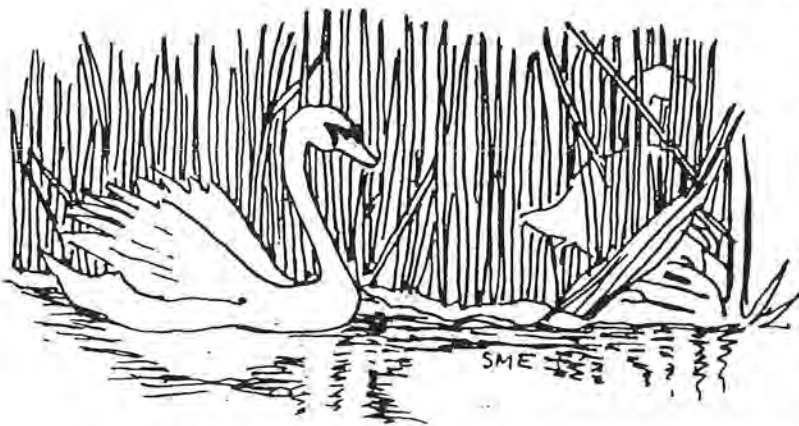
bottom of the nest, I wondered if the parents would reuse their real estate. Yes. The hawks have laid down a thick layer of green branches. The female sat on eggs. Now she is feeding 2 young. Down in the park, a forest of telescopes are trained on the nest, including Lincoln's cannon with a television attachment. Residents of Gotham and tourists line up to peer through telescopes or see the hawk family on the TV screen. Staring up, weekend strollers point out the nest to each other.

There was a time when birders told each other that "raptors mate for life." Now we add the second part: "or, for the life of the mate." Pale Male has been in charge of the Fifth Ave. nest for all 12 years of its existence. When he was very young, he and his mate were chased by crows and driven into tall buildings. He was knocked out, taken to an apartment and when he came to, was hustled back to the park. She was taken to New Jersey where her broken wing was mended. He drooped around the park waiting in vain for her return. The following year his mate was a bird with only one eye. They successfully raised a family but later she was found dead on the highway, perhaps having been hit on her blind side.

The first female was released from rehabilitation with a gimpy wing and a numbered ring around her leg. The two hawks found each other and returned to Fifth Ave. We called her Old Flame or First Love. But later, she was found dead of poisoning and was identified by the numbers on her bracelet. We called the next mate Blue Bill. She was very young when first they mated and Pale Male took an active part in showing her what to do around the nest. A year later she seemed more confident and he assisted her. Blue Bill disappeared and a dead hawk was found across the street from the Metropolitan Museum of Art about the time of 9-11. It was taken in for an autopsy but a power outage shut off the refrigeration for specimens and the bird had to be discarded. Last year we had a new female, called Lolita. This year she is older, more experienced and we call her Lola.

In the early years, the red-tailed parents would watch their young birds launch themselves out of the nest and down into a park tree. There the young were screamed at by mobbing birds and pecked at or forced to move about by raging crows. Now the parents try to steer their young to nearby rooftops where they can sit and wait to be fed without being harassed. If the 2 young hawks fledge successfully, Pale Male will be the father of 20 living hawks.

Swan Song Shuffle



Mute swans were brought from Eurasia to New York state parks in 1910 and 1912. Some escaped and began an enormous wild population. In about 1927, mute swans were nesting in the south end of Central Park. A young future birder paddled too close to the nest and was beaten off by the male swan. Years later he remembered the ferocious blows from the swan's powerful wings.

In 1995, a pair began nesting in the phragmites near Bow Bridge and nested there for the next 8 years. She hid from view on the nest. He protected the family from humans in rowboats and defended their territory from all the young swans they produced. As he aged, the male became more aggressive and we saw him lift up and run-fly after intruders. A swan's outspread wings are an awesome sight.

When swan chicks first appear, they paddle in line between their parents. They often climb up on their parents' backs to glide along in warm feathers. When the young are almost full-grown, all the family become friendly with the public. People come to feed them bread crumbs. They travel as a stately group, circling the shore for handouts and accepting offerings with dignity. Some observers scold as they watch. Bread crumbs are junk food for swans.

Anita Stillman devised an ingenious way to feed the swans cracked corn. She did not toss corn into the water where it sank immediately. She did not scatter it on a flat rock where their bills could not scrape it up. She did not risk hand feeding because swan bills are very powerful. Instead, she put cracked corn into a paper bag. She tilted the bag on its side and shook grain to the opening. Holding the bag by the top edge she taught swans to thrust their bills inside and snaffle out mouthfuls of corn kernels. Other people saw her and were impressed enough to do the same.

The mute swans survived a bitter cold winter of ice and snow. Ice covered most of the Lake and melted slowly. The swans began their nest as usual. But April fooled us. We had a snow storm followed by lots of rain. The female was seen standing on her nest in the phragmites. The eggs were all but covered in water, which meant the young were drowned. One of the adults was found dead at the Lower Lobe of the Lake early April 13, Palm Sunday. The crew who picked up the bird did not know to send it to Ward Stone so threw it away. The second swan was found the following Wednesday or Thursday. Other dead birds included 1 wood duck, 1 mallard and 2 domestic ducks. The swan and the wood duck were given an autopsy and we may learn the cause of death.

At evening, April 24, Ed Fagan visited the park after work. He watched a pair of swans joyfully inspecting their new digs. I saw one of them the next afternoon. The bird seemed to be guarding the territory but not very aggressively. He would bound up to encroaching rowboats (most containing people totally unaware of him) and try to position himself between them and Phragmites Island. The bird had a swollen throat, perhaps a fish. When I saw it again the lump was gone, but there was a dent around the top of the neck. On Sunday I was close enough to see a dark ring of constriction. The mark of a lasso? A pair of swans who were in the Meer are no longer seen there. Perhaps they moved or were moved to the Lake to fill that vacancy. Who knows, they may have been born on Phragmites Island. On the week end both swans were out and about.

Swans are monogamous and pair for life. Females mature quicker than males and breed sooner. She takes a mate in the fall of her second year and nests in her third year. Reproduction success improves with age. Are these birds really nesting or only playing house and staking a claim for next year's nest? We'll know more soon.

Central Park is 150

Anniversaries are meant to be celebrated and this one is important to many park lovers. I have been invited to several gatherings, starting with a special preview of the film "Winged Migration," which is wonderful. To float high over the earth, looking down on continents, and out at flocks of birds around you, is thrilling. Like Daedalus and his son, you experience the wonder and power of being aloft without the pain of Icarus' dying fall. If you want to escape the earth and feel the touch of wind and feather, go see this film now playing at the Paris theater. Bird experts find fault with some set-ups where the wrong birds are in the wrong places, but it's hard to be a sensualist and a critic at the same time. Go and enjoy.

I was invited to the screening as a thank-you from the Central Park Conservancy for participating in the NBC documentary "A Stroll Through Central Park" which aired Saturday, April 26. Lloyd Spitalnik and I talked about birds. He gave the numbers of birds ever seen in the park and rough numbers of bird species to be seen in a year. I described a downy woodpecker I had just seen

drill and feed on a nearby tree. All of that footage fell to the cutting room floor. Several people told me they saw it Sunday, (wrong night) and one told me of seeing birders without knowing he'd seen me. That's fame, folks.

I was called by Joe Berger of the New York Times. They were doing a big article on the park at 150. He joined our Wednesday group with photographer Librado Romero for a walk around the Ramble. It was a raw, cold day but we all had a grand time. The highlight for me was when Jane Creel put crushed egg shells down on a rock while I whistled and waved to a pair of blue jays. As we rounded the corner to the Maintenance Meadow, the jays fell upon the egg shells and Librado took their picture. He also got shots of a great egret at Turtle Pond and the red-headed woodpecker at the Locust Grove. None were selected for the article. Joe called me to fact-check and told me the article would appear Wednesday, April 30. The group were full of excitement as we gathered. They had seen the picture of us looking up with our mouths open. Why were our mouths open? Because jaws drop as people look up. As I moved through the park I was hailed as "red-crested sparrow" and learned they had been reading Berger of the Times.

I was invited to a gathering at the Dairy, April 29 where we were greeted by six handsome dignitaries. They thanked Olmstead and Vaux for the design of the park and Betsy Barlow Rogers for restoring its beauty during the 1980's and '90's. Many organizations were thanked for funding the park festivities for this year of celebration. When the crowd broke for a delicious lunch, Leah Krakinowski introduced herself and said she wanted to interview me for Voice of America. We did the interview at the chess and checkers house, a quiet place to sit and look at the scenery, and talk about birds.

A TV show, a Times write-up and Voice of America all in one week has left me grateful, dazzled, but dizzy. Too much party cake. Then by happy accident, I met 2 guys on a rock with a scattering of belongings. They are Belgian tourists and this was their first day birding in Central Park. They had seen a cardinal and a red and black bird flying. We checked their Sibley and, yes, it was a scarlet tanager. They admired American robins and wanted to see a blue jay. So I took them to Maintenance Meadow. No jays. We moved north to Turtle Pond, where they were pleased to see the "white" egret, buffleheads, cormorants, and the barn swallows they see in Europe. We moved north and saw the red-headed woodpecker in the Locust Grove. They had seen the downy and red-bellied but this was the best pecker of all, said Laurent Leclerq. Vincent Bulteau attached a video camera to his tripod and photographed the bird. Then at my suggestion he screwed in the telescope and we all oohed and aahed to see it in larger size. We hiked north to the Reservoir and just beside the bridge we saw 2 jays. On the water they saw herring gulls (common in Belgium) and great black-backed gulls. They see and handle lesser black-backed gulls, which they call "yellow legs."

What had they been doing in Belgium? Banding birds. They just banded 550 common terns, 100 sandwich terns, 80 little terns *Sterna albifrons*, and 10 black terns. They band at night. Terns fly in daylight or dark. But in the dark they can't see the nets. The birds are measured, weighed and banded. They just recovered a sandwich tern banded in Ghana. It's a first banding record from Africa for Belgium and maybe for all of Europe.

They gave me a parting gift to remember our quality time together. It's a band they took from a lesser black-backed gull and is stamped "L 39842." As I was typing this, I got a call from Dorothy Poole to come to 21 St. and the East River. I did and got to see a Pacific Loon (life bird) found by Ann Lazarus, and 2 red-throated loons fishing at dusk. More red-throated loons were seen on the Hudson River that day, none in breeding plumage. What a spring! And it's not over yet!



Side and To

View



THE ELLIOTT NEWSLETTER

Nature Notes from Central Park

Vol.9 No. 3

May~June 2003

Easy Path

Bell Chevidny got my name from The Central Park Conservancy and called to arrange a bird tour for herself and her husband, Paul. They entered the park at Central Park West, moved east along Turtle Pond and I met them near the King of Poland statue. Bell was traveling in a red motorized scooter. They borrowed binoculars at the Castle and I taught them how to adjust and use them.

As we moved along the south side of Turtle Pond, it was clear they were very aware of sound. They were glad to see large, slow birds: a great egret, a family of mallards with 5 ducklings. They were aware of every robin call and soon could identify them and starlings on the ground. Warblers were a problem because they move so fast. But we all saw a magnolia warbler and common yellowthroats. Then Bell made a U-turn and rolled downhill to the East Drive. We passed the food stand, rounded the corner and entered the Ramble.

We skirted the Maintenance Meadow and Evodia Field. At the Azalea Pond we saw mourning doves and red-winged blackbirds. Bell negotiated a bumpy, pot-holy path to Willow Rock. From the sidewalk we could see both a male and female cardinal eating seed or cracked corn on the rocks. I heard a blue jay and put out egg shells for it. Near the Summer House we had good looks at a male common yellowthroat which was sporting a big black mask. On the other side of the sidewalk at the edge of the Swampy Pin Oak area, we heard a loud churring and saw the red-bellied woodpecker. Bell rolled sedately down hill to Bow Bridge where we looked in vain for swans. Birders said they had not been seen for a week. We circled the Lower Lobe and then went north along the western shore of Rowboat Lake. Bell rolled down to Hershhead and identified many of the flowers at the shore. We twined around the walks near the Ladies Pavilion to admire May apple and false Solomon's seal. At Balcony Bridge we looked over the railing and there in midstream was a spotted sandpiper. At the Upper Lobe we saw a family of mallards all tugging at water plants and I pointed out the duckweed which covered the far end near the weeping willow.

We rolled uphill beside the West Drive. Near the crest Bell put on her breaks. Paul and I sat down on a bench for a rest near the weeping willow and they consented to be interviewed. Paul is a professor of law at NYU. He had just graded 95 student exams—all essays. Reading and grading was tiring. It was good to relax in the sun.

Bell is a retired professor of English. As a girl, she spent summers with her grandfather, Arthur Sullivan Gale. He was Dean of the Math Dept. at the U of Rochester and had a summer cabin on the Saint Laurence River. He watched birds and "we learned birds as kids," she remembered. In those days she could run about. At 21 she was struck by polio and has been in a motorized scooter or on metal crutches ever since. When she developed cataracts she began to learn plants, which is why she knew so many of the ones we saw around the Ramble. Now her vision has improved and she wants to learn birds.

What did they get from our day in the park? Paul said he learned how to look and to identify the call of a robin, Baltimore oriole, red-winged blackbird, and to recognize a warbler by its shape and behavior. Did they enjoy rolling around the Ramble? Oh yes! This summer the Chevidnys plan to buy binoculars and look at the birds around grandfather's cabin. It was a pleasure to be with them

and I was glad to focus on negotiable paths around the Ramble. I've given you a flat and rolling route that was deliberately stair-free. You can use it for members of your family, friends or yourself.

Skin and Bones

On May 19, I met Mary LeCroy from the Ornithology Dept. at the American Museum of Natural History. I was there to look at specimens of six birds in the museum's world-famous collection. She told me the museum opened in 1869 and its first bird collections were purchased in Europe. Many collections from all over the world were subsequently added. Exotic specimens were taken in the field on museum expeditions and brought back to New York. Today the American and the British Museum have the most complete collections of known species of birds worldwide.

Why do people preserve bird skins? So the birds can be studied immediately or more than a century later. Here's how you turn a dead bird into a specimen. You make a small incision in the belly region and remove the skin from the body. You remove brains and eyes from the skull. You stuff the skull and skin with cotton and sew up the incision. Next you put wings and legs in a standard position and wrap the bird in cotton to dry. Drying is not a problem in desert areas. But it can be moldy hell in a rain forest.

People who study the skins never use them for body length because some birds are stretched as they are prepared. Others are filled with extra cotton for an over-stuffed look. Wings, legs, bills and tails are measured because they are fixed body parts.

I was there to check field marks of birds we see around the park. I began with belted kingfishers. How many white dots decorated the dark head around the eye? Looking at a tray of skins taken in New York, I saw they all had a large white dot between the cotton-stuffed eye socket and the bill. Some of the birds also had a thin white line like bags under the eyes. All the males wore gray bands at the throat. I was surprised to see that female throat bands were gray flecked with rust. Male bellies and flanks were white. Females had an extra all-rust belly band, with rust feathers down the flanks.

Snipes and woodcocks were next because they had been seen together in the Oven during spring migration. The snipe is slightly smaller but both birds have long bills and legs, with short tails. Seen from above, snipe head stripes run from bill to nape. The larger woodcock wears 3 dark head stripes separated by thin tan ones and they reach from ear to ear. I sketched skins of both birds but something happened to the woodcock's stripes. They looked O.K. from the side, but seen from above, the black and tan lines were crunched and bunched, like a Navaho rug design. But even a century later, all the woodcock breasts were a lovely, soft peach, like a pale robin. I found that woodcocks are larger but they have shorter bills. I eyed the skull from front to back. The bill, though bent at the tip, was about 1 ½ heads long. Snipes have longer bills-- 2 heads long.

Hooded mergansers have puzzled me for 2 years. When I saw them swimming close by, their dark backs were crowned with a herringbone pattern of white lines. Were the feathers on the back or the wings? When I peered under the wing of a specimen I saw that its underwing was a twisting, cloudy pattern of gray and white, like fossilized marble. Just beside the wing was a long streak of white feathers. These markings are not visible when the wing is closed. Black feathers covered the upper wing. Tucked under the scapulars were 3 or 4 white feathers. They emerged halfway down the wing like icicles or long white claws. Female wings have the same wing accents.

Bird watchers argue about the identity of waterthrush warblers. But when you see a tray of skins the differences are remarkably clear. Northern waterthrush are smaller and have a dirty yellow wash on the belly. There are many speckles on the throat and most of the belly. The Louisiana is

Belted Kingfisher, ♀ juv.
St. James, L.I. NY
Aug. 16, 1911



SOME

Belted Kingfisher, ♂
large white circle is
cotton in eye socket



Belted Kingfisher; ♀ Ad.
Onondaga Lake, NJ
Aug. 29, 1887

SOME

Hooded Merganser, ♂
back and inside wing

black wing with
long, white feathers



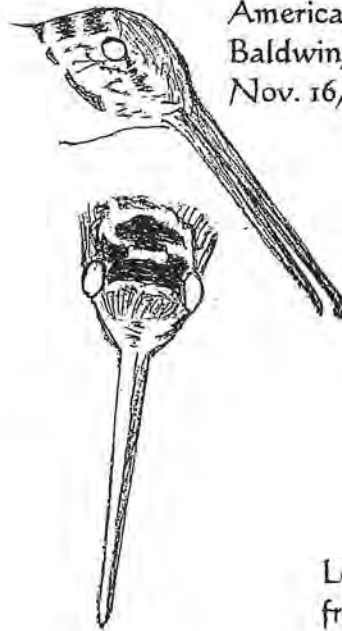
Common Snipe, ♂
Far Rockaway, L.I. NY
Jan. 1, 1890



SOME



Common Snipe, ♀
Bay Shore, L.I. NY
Nov. 3, 1908



American Woodcock, ♀
Baldwin, L.I. NY
Nov. 16, 1908

Northern Waterthrush, ♂
Central Park W. at 81 St.
Sept. 29, 1981
collected by Karl Koopman



SOME



Louisiana Waterthrush
from several skins

larger, with a bigger bill and an all-white throat. The pale cream belly is surrounded by fewer but thicker streaks. The whole bird looks lighter and the white eye line extends farther behind the eye. Some park birders believe these birds move differently. Lloyd Spitalnik says the Louisiana sashays as it walks whereas the Northern jerks along in a great hurry. Perhaps the Northern's legs are longer.

At the museum I fell into conversation with a bird artist named Dale Dyer. He was doing a painting of an enormously patterned bird. Painting bird illustrations is Dale's first love. To finance it, he is a courtroom sketch artist for CNN-TV. When I mentioned leg length, he brought over a ruler and measured the wing and the tarsus on 3 specimens of each species. All 3 Northern waterthrush were the same size. Their wings measured 7.5 cm and their tarsi measured 1.9 cm. The 3 Louisiana wings varied: 8.2, 8 and 8.1 cm. Their tarsi measured 2.2, 2 and 2 respectively. Although the sizes differed, the ratio was about the same: the leg was about 1/4 of the wing length for both birds. He explained it's useful to measure bones because they don't vary.

Nests and Rescues

I was asked to do a walk for 2 people from ABC-TV. I went in to scope out the place on Monday and discovered lots of nice nests. Sure enough, it rained on Wednesday. The people from ABC neither showed up nor called. But the nests were worth looking at twice over.

At Turtle Pond there is a walk near the Great Lawn. A yellow call box stands beside the walk and two old elm trees stand inside the wire fence directly across from the call box. In the lowest elm branch, almost touching the fence, there is a Baltimore oriole nest. It is close enough to see without binoculars and it bounces with life. Both orioles dazzle the eyes as they fly in and out to feed their young. In the adjoining elm tree orchard orioles made a nest in the very same branch they used last year. But the birders say they were forced out by a family of house sparrows. The black and chestnut male continues to be seen around the old nest site, but no one has reported a new nest.

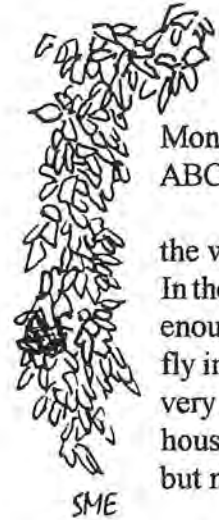
In front of Shakespeare Theater, the Romeo and Juliet statue had a new decoration this spring. It was a robin's nest, attached to Juliet's breast. The birds were protected from the rain by the overhang of Romeo's chin. When I saw it, the nest contained 2 hungry birds being fed by both parents. As I snapped pictures of the nest I noticed its exterior decoration: a silver streamer and a light blue ribbon. When I returned in the rain the nest had been removed. Perhaps the young were old enough to leave it.

Over at the Upper Lobe, I spied a green heron crouching over her nest. Around the corner in the crotch of a totally dead tree beside the railing of Bank Rock Bridge was a robin's nest with feeding parents and large young. When I returned 2 days later, all the robins were gone.

On Wednesday morning as I was waiting for the people from ABC, I talked to Martin Calzadilla, a zone gardener in the park. He likes working in the rain. The park is quiet and he doesn't have to water the plants. I saw him again later and he offered to show me something. In the back of his truck was a carrying case and inside it was a baby raccoon. He was on his way to the Castle. I raced through Shakespeare Garden, up the steps and around to the back door of the Castle and took a picture. Martin held the carry case and baby raccoon was chewing on Ranger Gary Rozman's glove. This was the second time they had taken in baby. The day before they fed it puppy formula. They explained that kitty formula is better but they didn't have any on hand. Ranger Sheridan Roberts was taking the raccoon to Bob Zink, a rehabilitator in Staten Island.

When I reached Regina Alvarez, I learned she had discovered the raccoon on her way to work. It was hiding under a car in the closed parking area just west of the Maintenance Building. The raccoon was handed to her through the fence and she put it beside a red maple at the northwest corner of Maintenance Meadow. Two other young raccoons were up in the tree. When baby began to climb, Regina left. But it fell from the tree and when she returned it had a bloody nose. The Rangers received it at the Castle and decided it needed a check-up.

Eventually I reached Bob Zink in Staten Island. He told me the raccoon was a female, about 2 ½ months old. She had a slight concussion and her right canine tooth was chipped. Also he noticed she had a very small separation between the left and right sides of the roof of her mouth. They didn't quite meet and merge. This cleft palate didn't prevent her from eating but Bob Zink says it could have been the reason her mother stopped looking after her. Like all the raccoons in Central Park, she did NOT have rabies.



SME



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sme

THE ELLIOTT NEWSLETTER

Nature Notes from Central Park

Vol.9 No. 4

July~August 2003

The First Central Park BioBlitz

On Friday, June 27, 2003 at noon, we began the first-ever BioBlitz in Central Park. A large crowd of people were milling about at the Dairy when I arrived to report on this most important event. I found a man with a clipboard who was going out with a group to discover trees. I handed him descriptions of the mystery oak I have been reporting about in this newsletter, with illustrations, photos and a map of where it stands. I begged him to look and tell. Next I talked to Suzi Zetkus of the Explorers Club who was handing out bottled water. She told me to go to Bethesda Fountain where divers were taking samples of pond life from the Lake. On the way I bumped into a group who were examining fungi growing on a tree. They invited me to join them on their journey up the west side of the park. It was hard to say no. I told them I would try to find them after discovering what the divers were catching.

The day was hot, humid and hellish. The sun beat down on the fountain and the terrace. I saw a group of oxygen tanks, lined up on their sides, to be used by underwater divers and perhaps for the heat-stricken public. Beside them, a man held aloft a long pole with a fuzzy end— the sound man for one of the television stations. A diver in black strapped a knife to the outside of his leg. Habit or anticipation?

I sat in a thin strip of shade at the western edge of the plaza and watched 3 divers splash in the fountain. They washed mud from head, eyes, hair and diving suits.

Sitting on the curve of Bethesda Fountain, a blond Adonis was talking to the media. Beside him a middle-aged woman suddenly tipped her head back and laughed. Later, I learned she is Sylvia Earle, an Explorers Club member and world-famous deep sea diver. She reported the visibility in 12 feet of water was poor, and it was definitely surprising to see rowboats passing over her head.

The crowd thinned but the media continued buzzing about. Divers came out of the Lake carrying dripping bags. I interviewed Sam Jones, who was under water for 45 minutes. Could he see anything living down there? Not with his own eyes. But probably with a microscope. What was it like down under? "It's like sitting in a dark, cold closet with no oxygen, no light and a couple of feet of mud at the bottom." He is a coral reef biologist. On a reef, the visibility is much greater and he can see many more species. Yes, I said, but there's gold in that mud. Magnetic bacteria were found in this very lake and sent aloft in the shuttle. (See this



newsletter Vol. 9, No.1) The shuttle broke up but experiments survived, perhaps including the magnetic bacteria. He looked thoughtful and said he would check out the scientific literature.

I left the divers and walked north. Deep in the Ramble I looked at fungi I didn't know and lots of red and white mulberries I couldn't reach in very tall trees. Robins, starlings, cardinals and catbirds were snatching the fruit. A pigeon pecked at the smashed mulberries that covered the ground. It eyed me and moved aside reluctantly. Was it eating fruit? No, picking out the seeds.

At Belvedere Castle I rested in the shade and drank a bottle of water. This was no day for a park-length walk so I was very grateful to Ranger Gary Rozman for a lift in his air-conditioned van to North Meadow Recreation Center (formerly the Ranger Headquarters). Inside the Center it was crowded but cool. People were milling about in blessed air conditioning. I pushed my way to the desk and greeted Suzi Zetkus. I told her that so far it had been disappointing. Nothing exciting came up with the divers, it was boiling and I had found no fungi or tree groups. She told me to go out with a beetle group. Just as we were leaving, David Krauss invited me to join his bird group that were just going out. David is the lynch-pin of our Christmas Count in Central Park and fun to be with. It was hard to say no but beetles were calling. I quickly told him about magnetic bacteria, asked if he had access to an electron microscope and said I would write him with my newsletter.

Keil Burkey, who works for the Natural History Museum, was the tallest person in the beetle group with the deepest voice. He said he was interested in beetles that are decomposers. They feed on dead animals and animal manure. Keil is interested in dung beetles, a kind of scarab beetle. He is also interested in burying beetles, which are not common in NY state. These beetles bury dead food for their young so that "the old can be recycled into the young."

Keil set 4 traps for beetles: 2 baited with carrion and 2 with dung. He put 1 of each kind in the meadow and 1 of each kind in the forest. The next day he would return and take out whatever fell into the trap. He would take off the cardboard roofs, pull out the cans and fill in the holes.

Other members of the group were harvesting insects from plants. Katie Stephens collected a soldier beetle. She found it on a leaf, scooped it up and put it in a vial. Ming Huang captured insects with little baggies. He would place a baggie over the insect and jiggle the leaf slightly. "This frightens the insect," he explained, "and it flies up to the light." Keeping the bag upside down he brought a bottle of alcohol under his prey and tapped the bag. Two taps and the insect fell into the alcohol. Ingenious. What had he caught? Mostly flies. And 5 real bugs.

We were joined by Eric Wong, wheeling his bicycle. Eric is an elementary school science teacher at Hunter. Earlier, he had been in the Ramble looking for ticks with a tick expert. To find ticks you use a white sheet and drag it on the ground. In this case it was the expert's lab coat folded into a kind of rectangle. They dragged it along at the edge of small animal paths, not people paths. They would stop and look over all the black dots for the ones that moved. Then they would continue dragging. In 3 hours, he said, they found only 1 deer tick, which was not good. Not good for you, we said, but great for park people. Perhaps this tick had come in on a dog.

We went to the Great Hill with Elizabeth Nichols. The previous day she had set traps



for dung beetles and now we were visiting the traps. Dung beetles tend to specialize. They eat herbivore dung or a particular kind of carnivore dung. When you want to trap them you use both kinds of bait. Elizabeth set these traps with horse dung. And what did she get? Flies. Lots and lots of calliphoridae flies. They are also attracted to carrion. The aim was to get beetles, she said, but added, "we'll take what we can get." Well, she didn't want all the dead flies and gave me a vial of them to take home. Thinking aloud, she added, "Maybe part of the reason I didn't get any dung beetles was because I was using the wrong dung. I couldn't attract any carnivore specialists. But since we didn't even get any herbivore dung beetles, I wonder if the problem was that it just got very hot. My dung is a lot lighter than when I put it in."

I kept the bottle closed for a week at room temperature. When I opened it, the smell was a sock in the nose. I removed 2 and quickly closed the lid. It took a while to spell Califorday as *Calliphoridae*. I looked down the species list for this genus and remembered Elizabeth had said *Calliphora vomitoria*. The smell lived up to the name. In my American guides I found blue bottle fly. In the Collins guide I found bluebottle, as the Brits say. The flies have gray heads, large red eyes and clear wings. The abdomen or back end is bright metallic blue, and these still glittered a week later.

In the North Woods we found a dead log and scraping it, we saw termites. I told the group about termite hatches in mid-May. Birders spread word of a hatch and we all rush to the spot. Emerging termites are snaffled up by eager birds which snap off their wings and gulp down the rest. The birds are so eager, they hardly notice bird watchers and the watchers are thrilled. The termites are all one species, *Reticulitermes flavipes*, according to Kumar Krishna, a park birder and a world expert on termites.

The heat was getting to me and I left the group, walking east to the Meer. There sitting on the ground were Gammy Miller and Ken Kimerling who had been BioBlitzing earlier and then had taken a rest. I said I was returning to the top of the sloping meadow to see the preparations for the moth count that evening. They decided to join me. As we were about to leave, Gammy pointed to the ground and said, "Oh look. Stinkhorns."

Stinkhorns are tall and slender with a conical head, and this phallic mushroom proudly wears a red band on its stalk. The cluster of them was large, but due to the sun and heat they had lost their erections and were wilting on the ground. I took this specimen and later learned its name is *Mutinus caninus* dog stinkhorn. Thank you, Gammy, for noticing them.

When we reached the top of the meadow there was Cal Snyder attaching heavy cloth to a line. The plan was to use ultraviolet light to attract moths to the sheet and capture them. I wanted to stay but I was heat-blitzed. The forecast was for rain and when the sky began to spit it seemed a perfect time to leave. Later I learned they didn't get to the moths until 9 PM when I was fast asleep.

The next morning I went directly to the North Meadow Recreation Center. The place was cool and crowded. Experts were sitting at a long table arranging their collections. Parker Gambino, a Field Associate from the American Museum of Natural History, told me he specializes in bees and wasps, which are groups in the insect order hymenoptera.

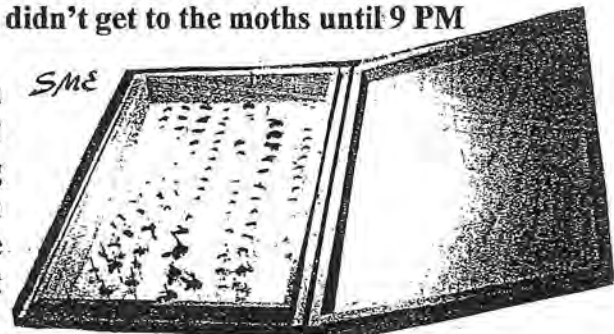
I thought there were 4 species of bee in Central Park but he had at least 50 lined up. He said he didn't collect carpenter bees because there is just one species. So he just eyeballed them in



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the field. Actually, there are small and large carpenter bees. They are closely related to each other even though they are very different in size. Their habits, he said, are somewhat similar.

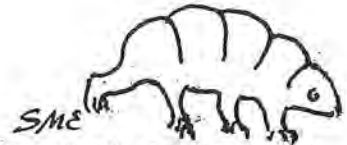
He showed me 5 species of bumble bees. How do they differ, I asked. Look at the abdomen, he said, pointing to the back end. This one has very small yellow markings very near the top. And this one has more extensive marks farther down. The markings on that one are more brownish or tanish than yellow. This one has a little tail, I said cheerfully. Well, actually, that's a stinger sticking out at the back. This one is a carpenter bee, he said, moving his specimen to a new location in the lineup. There were a few species of bumble bees he didn't collect. I think I can tell what they are just flying around, he explained.

He worked with several people and they collected on Friday from noon to 5 and a couple of hours Saturday morning. They collected the bees with a net. They aimed the net at the flowers where the bees would be visiting. When the bees were in the net they were transferred to a killing jar containing ethyl acetate—which smells like nail polish remover. He's not sure how he got interested in bees. He started with wasps—yellow jackets and social wasps. He found bees in the same places and thinks one interest transferred to the other. I thanked him for the interview and learned he is a high school teacher in Greenwich, CT.

I talked to Cal Snyder who was sitting at the next seat at the table. He was arranging many specimens on a board and was trying to finish by noon. As he worked he told me his title was Biodiversity Specialist in the Center for Biodiversity and Conservation. His job is to make web sites to help nature center operators, land use planners, and resource managers identify invertebrates on the web or CD Rom. There's a big need for easy-to-see-and-use tools that are cheap or free and will help a growing public learn, identify and remember what's in the metropolitan area. The plan is to take invertebrates which hardly anyone knows or sees out of limbo and into the public arena as a political resource for better environmental policies. They work to spread more knowledge to a bigger pool of people who can use it efficiently. This will benefit the invertebrate community and, by extension, all other parts of the biotic community. Cal thinks of himself as part of the pit crew in the Indianapolis 500. "We're in the global race to save biodiversity, but you can't save it unless you know what it is. We provide the specimens, the knowledge, the techniques at a small level. At a larger level it probably doesn't win the race but it makes the process more competitive."

As he talked, Cal was poking through heaps of invertebrates, plucking them out with a tweezer and lining them up on a board in front of him. I begged him to tell me what he was doing. We're sitting at microscopes sorting by size, morpho species, by orders, a mass of invertebrate material that was collected during the past 23 hours. We will try to get a handle on what sort of scale the biodiversity is, the rough number, so that they can add the species count to the BioBlitz.

The young man sitting next to Cal was wearing glasses and a band of light and magnification on his head. No, he couldn't give me an interview about moths because he was working against the clock. Beside him at the table was an unattended microscope. But the owner was nearby and told me he was Dr. William R. Miller from Chestnut Hill College, Philadelphia, PA. He studies the animals of the phylum *Tardigrada*. "They are microscopic, aquatic invertebrate, about ½ millimeter long that live in the water that is trapped in mosses and lichens. The tardigrade dries up when the mosses or lichens dry up and it comes back to life when the moisture comes back to the mosses or lichens. So any place you find moss or lichens you are apt to find the animal. Most biologists have never seen one. They only know it



from a note in the textbook.

The tardigrade is not rare. It's that people don't look for it. They don't think about it, it has no economic value. It doesn't cure any diseases, it doesn't cause any diseases, it doesn't affect our crops, or our livestock. It doesn't make anyone millions of dollars or things of that nature. There's only about a dozen of us in the world that care about it." There are more now, I assured him as some of us lined up to look through his microscope.

"Tardigrades were discovered in 1770, or something like that, and I found it this morning about an hour ago." I look in his scope and see what look like pieces of rock with something light and luminous in the upper left corner. "Here," he said, "I'll focus it down for you." Suddenly the white critter was center stage and it was crawling! I thought it looked like a caterpillar but tapered at both ends like a coissant. It seemed to have 5 segments and feet with claws. I also saw 2 dark dots. Did it have eyes? "They are not image-forming. They are bundles of nerves near the surface of the cuticle that are probably light-responsive. You can't see them outside, but when you put them on a slide they're very evident." I said it moved about very well. "Yeah. They're very flexible and can do about 180 degrees. They can also bend over backwards. They crawl under and over. Their environment is a micro-canopy of mosses and lichens that they live in arboreally and under water." That's thrilling! I said. You've made my day. "Well, good. You've made mine."

The young moth man left his post to be interviewed by Ch 1 TV and he was making a hash of it. Without his boss, Eric, he was unwilling to utter anything to the pretty young girl asking questions. His answers were so buried in qualifications she gave it up and moved off. Eventually I learned he was talking of a very rare moth, one Eric hadn't seen in a very long time. It could be *Orthanoma orstapada* or something that looked like it. He told me the wing patterns of the 2 moths could be convergent and he couldn't be sure which moth it was until they dissected the genitalia. Interesting, I said. That's how Kefyn Catley identifies spiders, by genitalia. He seemed genuinely surprised. Having divulged the name of a moth, he was willing to tell me his. He is Jim Hayden, a student at Columbia and The American Museum of Natural History. He's an environmental biologist and an amateur taxonomist, which is what he wants to do. I asked him about the moths that changed their colors over time due to environmental change. That's a very controversial topic he said. I have no idea how mutable moths are. Many moths feed on one plant or a very narrow range of plants. You can see moth species over a century in a collection. That's real value because some of the moths are priceless. Seeing the moths around here and knowing what they feed on means you can infer plant distributions. Jim Hayden's a dedicated moth man; he needs to learn how to meet the press.

I saw Kile Burkey and asked about his beetle traps. Not successful. He didn't collect any of the insects he was after. He couldn't say why because he's had success with these traps in the past. Maybe the beetles just weren't out there. I asked him about the night before. It began at sundown or 9 o'clock, he said. They used black or ultraviolet light and had a lot of insects coming in. There were mostly moths, a lot of different flies but not many beetles. He found a couple *trichoptera* or caddisflies. They are aquatic flies and they were probably there because they had water down below (in the Loch).

Carmen Chapin is a botanist for the US Department of Agriculture. She had been out that morning with a group of 7 novice botanists. They covered the water at the 100 St. Pool and went back and forth along the Loch. They found a lot of plants of various shapes, colors and textures and focused on the ones that were flowering. They would walk along until someone

found a plant they were interested in. They would stop and all work together using a plant key to name the plant they saw. Now those people know how to do that and I encouraged them to go out and buy their own plant guide and use it whenever they walk in the park.

Did she see anything she didn't expect to see? No. She started to give me a list of plants by scientific names but I begged for the common ones. They saw spotted jewel weed, a lot of poison ivy, bittersweet nightshade (purple flower), large oxalis (yellow flower), spiderwort (blue or purple flower), common smartweed or water pepper (little purple flowers, very short stems). In rocky areas they looked at trees. They saw sweet gum, some cherry species and slippery elm. Slippery elm? I will look for them. Too bad they didn't find something rare. Carmen said, "That's not surprising, but my goal was to help people enjoy their environment. For the BioBlitz, it's part science and part getting the public in."

Paul Sadowski is with the New York Mycological Society and was in the North Woods. He said this time of year was not a great time to look for mushrooms. It takes time for mycelium, the "root" system of mushrooms, to grow. "We usually find summer mushrooms such as the chanterelle in July and August. By fall they've had time to grow and send up their fruiting bodies, which are the mushrooms."

"Today we found polypores, which grow all year round and we found a lot of myxomycenes, which are imperfect fungi. They don't send up large fruiting bodies, but very tiny fruiting bodies." Paul lost his lens in the woods, but let me look at his finds through one of the field microscopes. "They almost look like raspberries," he said. "As they mature, the skin goes away. There are little fiberels that are wound up inside of the little berry-like structures. The fiberels unwind and end up looking like a grassy bed. See the underside of this organism. It looks like a lot of fine hair, or mold." I look down at what seems like spiky tan grass, with heads like bayonets and legs that stick out in funny directions. This fungus is on the underside of a piece of dead wood, and its name is not yet known. I asked if he'd seen a lot of these before. "No. I've read about them, but this is the first time I've collected them. Usually we pick big stuff and put them in our baskets. But there weren't any today so we collected these."

I told him about the stinkhorn. "Probably *Mutinus caninis*, which, forgive my French, is a dog's dick. Mutinus was a goddess. Greek virgins would go to her to pray for fertility."

On Friday night, Fred Koontz, Vice President of Wildlife Trust went out with Rodrigo Medellin, a bat expert from the University of Mexico who is spending a year at Columbia University. The day before, Medellin searched the park for good bat flyways. On Friday he brought mist nets and 9 ft. bamboo poles. A group of 7 set out at 7:45 and reached the Ramble at about 8:30. They set up a net near the Gill and one down near the Lake. Then they left the nets and walked about. As they walked, they collected the curious and the group swelled to 20. Using powerful flashlights, they saw raccoons and a mouse he wasn't sure of. (Our owls eat white-footed mice.) At 9:45 they returned to the nets and found they had caught 4 bats, all in the net near the Gill. They were all big brown bats. They got the bats out of the nets and Fred said it was a real treat for the group to see them up close. Then they let them all go. They also saw a dead red bat that looked sort of mummified. It was brought in from the North Meadow.

This is all I can report on the BioBlitz so far. There is an ant list with all scientific names. I don't know about the spiders, centipedes, tree and fungi lists to name a few. More data will come in and I will report the findings. I send you this extra long newsletter because I think this census is the most important nature event to happen in our park, ever. We have become, as Cal says, a pit stop for biodiversity in a race to save the planet in this new century.

THE ELLIOTT NEWSLETTER

Nature Notes from Central Park

Vol.9 No. 5

September~October 2003

Vivat Linnaeus!

I rushed to get the BioBlitz Newsletter to you before the end of June so that I could concentrate on a musical called "Vivat Linnaeus-2." Carolus Linnaeus (1707-1778) was a Swedish botanist who developed a system of classifying plants and animals using Latin names for their genus and species. These scientific names are italicized. The genus name is capitalized, the species name is all lower case. Here he is with his favorite plant, *Linnaea borealis*. It is a honeysuckle and grows in Europe and North America. The plant's common name in English is twin flower. It has other common names in Sweden and Russia, but the scientific name is the same everywhere.



The Linnaean (li-NEE-en) Society of New York was begun by 10 medical students and bird watchers 125 years ago. The musical to celebrate the man and the organization was performed at the American Museum of Natural History on October 28, 2003. I directed it, and wrote all the music and most of the words. It was a long and frustrating process to find a music arranger and someone to sing the part of Linnaeus. With the help of Jill Hamilton, I found Gene McBride, who arranged and played keyboard chords for my melodies and sang the part of Linnaeus. He also donated his 2 sons to sing in the chorus. Beside the McBrides, the chorus consisted of Dale Dancis, Jill Hamilton, Zaimah Sabree, Joan Weiss, Richard ZainEldeen and me. I began the show with a song of Linnaeus' great-great grandmother, who was burnt at the stake as a witch.

Jeff Nulle, who edits this newsletter, said I should not write about this musical because it was not about Central Park. But the effort took 4 months of my life and is the reason this issue of the newsletter is late. Besides, Jeff was the star of the show, so I don't see how he can object to a few more words about it. As Dr. Edward Anser (goose) of Lodi Community College, Jeff gave us a talk called "Introducing the Warbleo!" The good doctor thought he was addressing the Linoleum Society, and told us of his discovery of Northern parula warblers which had mated with the blue-headed vireos to become a brand new species he has christened the warbleo. Some of these hybrids sing like warblers, while others sing like vireos and their songs tend to cancel each other out. Now Dr. Anser is teaching his birds to whistle human songs. His slides of the warbleo looked very like a Peking robin, a popular cage bird that escaped and was seen by many birders in Central Park some years ago.

"Vivat Linnaeus-2" will become "Vivat Linnaeus-3" in 2007 when Linnaeus turns 300. He will be celebrated in many places around the world including Sweden, London, at the Brooklyn Botanical Garden and the American Museum of Natural History. Stay tuned, especially if you can act, play, sing or dance. Your skills will be needed.

Lingering Autumn and Lengthy Migration

This fall seemed both mild and wet and I thought the migrating birds were passing through our park in slowmotion. To check this impression I had a long talk with Tom Fiore.

He didn't feel this migration was remarkably different from others. There was no drought and that, he said, was appreciated by all the plants from the smallest to the biggest, but it made spying on small birds more difficult. At the beginning of July about 180 species of birds had been reported in Central Park during the first half of the year.

Before fall arrived warblers reappeared. Birders were reporting yellow warblers and Louisiana waterthrush in July. Tanner Spring was a good place to see birds early in the season. Then fewer birds were seen and those not migrants. By the end of September more birds arrived and some of them lingered. On Sept. 21, almost the last day of summer, the birds came pouring in. Tom said the count that day was 115 species of birds ! And 26 of them were warblers. Most of the action was in a large pin oak on the east side of Maintenance Meadow. Cape May warblers--2 immature and 1 adult male-- were in that oak. Cape Mays have been in short supply in the past few years and are prized. Tom said he counted 80 birders at the tree while he was there. But people kept coming and going all day. I snapped a picture of 32 bird watchers looking into the tree that morning but alas, I had no flash and the shot was too dark. The following day, Alex Wilson found a Connecticut warbler in the northern part of the park and showed it to Tom.

I asked Tom about thrushes. He thought their numbers were about the same except the wood thrush which may be less. What we lack in wood thrush we more than make up for in hermits. They were everywhere in September and October and in November he found a dozen one day. On Oct. 3, a red-headed woodpecker was seen at Bowling Green, but none have been reported in the Locust Grove. In October, a clay-colored sparrow was seen on Cedar Hill. And on October 27-28 a Wilson's snipe was seen at a rain puddle in Maintenance Meadow and reported by Jack Meyer and Marty Sohmer. This bird was called a common snipe until recently when the AOU or American Ornithologists Union discovered enough differences to split it from the European snipe. They keep "common snipe" and we get "Wilson's." I learned that Ann Shanahan found a young and limp sora rail beside the Metropolitan Museum of Art. She took it to a rehabilitator who said it was stunned but not badly injured. The bird was taken to Jamaica Bay and released there in open skies.

I asked about owls. Tom heard blue jays screaming at the Meer and eventually found a gray screech owl in a tree. Presently the jays gave up mobbing and went back to feeding. On Oct. 12 or 13 he saw a long-eared owl about 40 feet up in a maple tree at the Swampy Pin Oak. On November 7, he spent 4 hours at the Castle scanning the skies for big birds and saw 168 turkey vultures. Some flapped and flew in single file. Others formed kettles, circling in a thermal of warm air. They would turn and glide, as they cork-screwed up and out of the thermal and flap to join other tvs in distant kettles to twirl again. Flapping takes lots of energy; circling a thermal does not. Tom said he could see 8 vultures in the sky at once. The same day he saw 2 dozen red-tailed hawks passing the Castle.

My thrill this fall was to see a meadowlark in the sloping or Wildflower Meadow on Marathon Sunday. I was with Sylvia Cohen and we had been to a delicious brunch at the Dana Center. We circled the Meer, looked at the display of mums in the garden, and crossed the East Drive to the meadow. We both called the bird at the same time, she by its movement and I by its tail. When it sat, I saw a pale chest but the white wedges at the corners of its tail were clear. I had not seen a meadowlark in Central Park since my partner Lambert Pohner died. Usually they are seen early or late; this noon bird was surprising. Tom said that other birders found our bird plus one in full color that afternoon. Sylvia returned and saw both. I went south to see

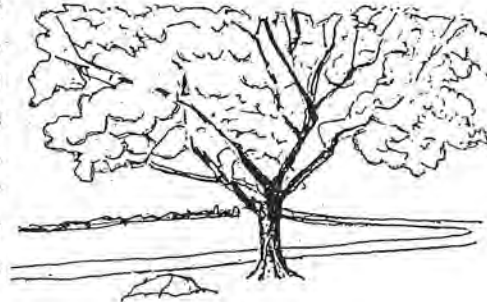
the sour gum or tupelo in the flat meadow below Belvedere Castle. There it stood in silent majesty, decked in flame from top to bottom just before wind and rain swept away its glory.

Measuring Trees

In 2002, when Edward Sibley Barnard first published his tree guide, "New York City Trees; A Guide for the Metropolitan Area" published by Columbia University Press, he called me and we met in Central Park. Over a delicious lunch Ned signed and gave me a copy of his new book. It contains information on how to identify trees, the best places to see them around town, the official collection of NYC Great Trees, and 10 tree walks with maps. That sounds like a tome, but the book is thin, light and narrow enough to fit in your pocket. I met Ned Barnard at Readers Digest Books in the 1970's where he oversaw the production of many useful books. His experience shows on every page of this guide. Facing pages are crammed with information but the layout is clear, attractive and uncluttered. His photographs of trees, bark, leaves, flowers and fruit are excellent, The maps are understandable and look doable. I tell my bird classes that they need to learn trees, since birds visit, feed and live in them. Many birders have bought this book. Some of the print is too small for me to see so I use a magnifying glass.

After lunch we took a quick walk through the Ramble. I showed him our sour gum or black tupelo. He learned about it after he photographed a 3-trunk specimen north of the Alice statue. At Evodia Field I pointed out our evodia being crowded out by its neighbors. Ned was surprised to see it and told me of a much bigger evodia tree in the Southwest of the park. I asked around about it. None of the birders and park staff I talked to had seen it.

Then I talked to Howie and Anita Stillman. The Stillmans feed squirrels throughout the park and as they tour, they study trees. About 3 years ago Howie began puzzling over a tree with smooth gray bark decorated with small bumps and scars on the surface. The leaves were pinnate, the leaflets opposite each other along the stem. Then in the fall the tree put out big pink flower clusters. Anita saw a tree that looked the same at the Evodia Field in the Ramble. They compared trees. Both were evodias. Howie told me how to find this tree. Regina Alvarez and I tried twice without success.



So on October 14, Anita led me to where it stands. It grows on a rise overlooking Heckschere Playground with its back to the West Drive, 59th St. and Columbus Circle. There is space around the tree and a low rock to sit on. The Stillmans chided me for not getting to the tree when its blooms had turned to seed. I was rather testy when I told them it was not for lack of trying. I really wanted to see which birds were feeding there on their way south.

SME

There is another tree in our park with bright pink clusters of fall flowers and tiny seeds. It is short and skinny with huge, pinnately compound leaves 2-4 feet long composed of many leaflets. This small sketch of a cluster is really 17 inches long. The tree stands west of the children's playground at 76St. and Fifth Ave. In September, my Wednesday morning bird class visit this tree called Hercules-club. The twigs and bark of the tree grow stout spines, which is why Hercules and his club became part of the name. People used to chew it when they had a toothache so it is also called the toothache tree. It's had 2 scientific names: formerly *Aralia spinosa* and now *Zanthoxylum clava-herculis*. (Try saying that 3 times.) Regina had it fenced and it is flourishing. This fall, we timed our visits perfectly. The flowers had opened to reveal tiny black seeds. Hungry birds were too busy snatching seeds to worry about us, and we could



SME

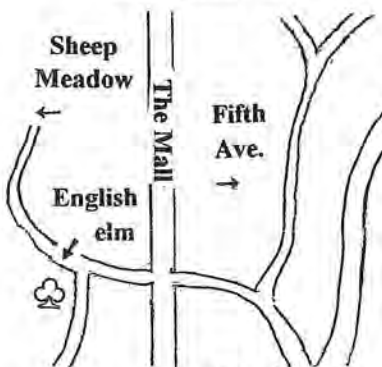


stand very close. The arrangement of leaves and clusters looks so like the evodia, I thought they must be kin.

They are! Both Hercules-club and evodia belong to the rue family or *Rutaceae*. There are more than 1,000 species of trees, shrubs and herbs in this family. They live in warm and tropical parts of the world such as South Africa and Australia. The ones in North America, including Hercules-club, are small trees. According to "Collins Field Guide to Trees," there are 50 species of evodia. They grow in China, Korea, Australia and Polynesia (also in gardens of Scotland, Ireland and in St. James Park, London). On page 63 of Ned's book he lists Great Trees of Manhattan including the large Central Park evodia *Tetradium danielli*, "a rare 58-foot native of China and Korea." The London tree in my 1978 Collins guide is *Evodia hupehensis*. The second names show they are different species. The different first or genus names show all 50 trees have been reclassified and given a new name. Thank goodness the common name is still evodia, which is easier to say and remains the place name for the winter bird-feeding station in the Ramble. Ned lists both new and old names in his index. Good thinking!

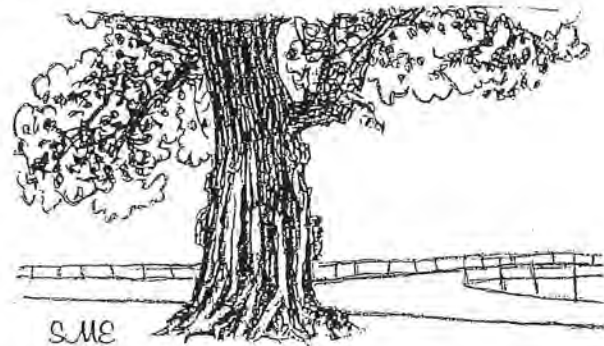
On Nov. 2, Chris Seita and I set out to measure the evodia. To size a tree trunk, you place a tape measure at breast height or 4 ½ feet and, like threading a belt, circle it to learn the number of inches of its circumference. Turn the measure over to the same spot on the tape and you learn how many inches it is across. We learned the diameter of the evodia is 32 inches.

Neither Chris nor I had measured tree heights before. We moved back 90 feet from the evodia and aimed at the highest point on the tree with an altimeter shaped like a gun. We both got 66 feet for height. Chris looked at the instructions and said there was something about aiming at the base of the tree for another measurement, perhaps to compensate for our height. In Ned's guide, the figures are 31" diameter and 58' for height. Well, the tree could have gained an inch around its trunk since it was last measured but probably not 8 feet in height. We'll try again. To help relocate the tree without leaves, Chris checked the numbers on the lampposts at the West Drive. It's flanked by # 6004 and 6006 and looks directly at # 6005.



SME

Next we visited an old English elm which stands between the Mall to the east and the volleyball courts and Sheep Meadow on the west. The huge warty trunk also stands just south of the walk that crosses the middle of the Mall and wanders east, under the viaduct, toward Fifth Ave.



We measured a diameter of 72" and a height of 75'. We will recheck the height when we have read the instructions more carefully. This tree is over 100 years old. It was on the map of the first tree survey of Central Park published 100 years ago. It's thrilling to see it on an old map and in exactly the same place! A sense of permanence is very comforting.



Come to the 104th Central Park Christmas Bird Count Dec. 14 at 8AM. Meet at the South Pumping Station of the Reservoir at 85th St. Wear layers, and perhaps plastic if the weather is bad. Bring binoculars, guide, pen and \$5 exact. We divide into 7 teams and cover the park. At noon join birders at the Arsenal for all-park tally and reception.

THE ELLIOTT NEWSLETTER

Nature Notes from Central Park

Vol.9 No. 6

November~December 2003

When the Snow Lay Round About

In 1987 a mix of snow and rain fell on the Christmas Bird Counters in Central Park. Bob Krinsky and I were part of a group covering the northeast part of the park. As we slogged through wet snow, we were accompanied by a Dutch TV crew of 3. The skies were very dark and the crew said they didn't think any of the film would come out. They stayed with us 2 hours then left for Washington to interview I.F. Stone, who broadcast an extremely popular TV news report for the Netherlands. They interviewed him about his new book and his life, shortly before he died.

The count that year was jolly despite the snow but bad enough to be remembered. It was followed by years of passable weather until 2000 when we tabulated the birds in a violent rain storm. People still talk about trying to count birds beneath the flash of lightning, the boom of thunder and torrential rain pounding down upon them. But this year's count was held in the most daunting weather I've seen in over 30 years.

Snow flakes began to fall just as we gathered at the pumping station at 8 AM. By the time people handed in their name/address cards and cash, formed into counting groups and took Counting Sheets, Rules and Tips Sheets and Section Maps, it was 8:15. Everyone had dispersed and a lone latecomer wrote her name and handed in her money. Off she went to find a group of counters and I did the same. I walked through the Ramble seeing 3 house sparrows and no counters. I strode along the Great Lawn. There were no birders, but plenty of dog owners out with their dogs off the leash running and pooping everywhere. One ginger dog laid a large pile right in the middle of the walk and I shouted after the owner to come and clean up. Silence. Then a woman asked me if the culprit was a ginger dog and when I said yes, she whipped out a yellow Gristede's bag. "It's not my dog," she explained, "but I know the owner."

I walked to Tanner Spring, which was silent and deserted. As was the Reservoir. I turned south and walked beside the West Drive. As I reached the traffic light and the 86 St. Transverse I saw a red-tailed hawk leap out of a tree. It flew low and landed nearby. Then I heard and glimpsed a crow. Two birds were enough to lift the spirits. I entered the Pinetum and followed a gray bird through waving snowy boughs. Eventually I could see it was a titmouse.



SME

Walking south along the Lake, driving snow stung my face. A group of mallards near the shore floated with their heads tucked under their wings. I felt sure they had already been counted. A steady stream of runners passed me on the drive. One of them was very tall and wore a santa suit which looked jolly but was no protection from the snow. Here and there I paused to take pictures with a throw-away camera. I hoped to get a few shots to turn into illustrations. But most are as dark as the Dutch TV crew's must have been.

I snapped a very dim picture of the Falconer statue, my best view of a birder and a bird for the day. Near the Mall I found the old English elm. Some of its lumps and crevices were dusted and traced with snow which was now ankle deep. I felt chilled, my fingers stiff with cold. It was time to give up the search and go to the Arsenal.

I found people setting up tables and chairs on the third floor. Who, I asked, would put up the big Christmas Count Map that Regina Alvarez of the Conservancy and I made the year before? The job fell to Gary Rozman of the Rangers. Jill Mainelli of Parks showed him a cupboard full of ladders. When Gary was on top of the ladder, he gripped the map and the ladder wobbled. We held it and Garry taped map to wall just under the ceiling. The map unrolled slowly until it touched the floor. People could see most of the 7 counting areas of the park when they entered the room. Those that stepped closer could see the South End with Sections 7 & 8.

One Ranger complained she wasn't sure she could count a bird in a small park corner. I asked her if she had looked at the small Map Sheet for her area. Not really, she said, and besides, it was soggy. The maps in the field are meant to prevent some areas from being ignored while others are counted twice. Next year, the Rangers will get maps, too.

David Krauss came in looking cheery despite the weather. He had been to the Reservoir shortly after 7 AM to count all the gulls before they left for the day. Very few birds were there to be counted. At 11 o'clock he got into a van with a Ranger. They slowly circled the park twice looking for hawks overhead. He said there weren't any. Nothing was flying except snow. The 9 we saw that day were sitting in trees or moving between them. When David returned to the Reservoir, the place was full of gulls, something he has never seen in late morning. Due to this reverse migration, David recounted all the gulls—hundreds of them. I told him he's a hero.

Bedraggled birders arrived. As they stepped out of the elevator we told them to turn left and left again for the coat rack. They selected tables and sat down to put their section counts together. A number of people held up wet and dripping yellow count sheets and asked for replacements. They studied their numbers, talked over birds seen by their group and put it all down on dry sheets. Only then did they line up for hot cider, wine, coffee, tea, bread, soup, and later, cake with my bird logo.

When everyone had arrived and was seated, Parks Commissioner Adrien Benepe stepped to the podium. He welcomed the crowd, and likened our efforts to the postal workers: "neither rain, nor hail, nor sleet nor snow" had stayed us "from our appointed rounds." He correctly called ours the 104th count, one extra because Central Park and Princeton began this count a year before it was tried around the country. And, he said, shooting me a look, who knew about Princeton? He told the audience that as a young Ranger, he'd met Lambert Pohner and me when we did huge bird walks for the public. He said Lambert and I taught him birds and told the gathering that becoming a Ranger is a good way to start your life. He reported that on his way into the park he saw several birds including shovelers. The crowd chuckled and I was amazed. It was the first time I ever heard a park official familiar enough with birds to make timely puns on their names.

Adrien turned the floor over to me and we began the count. Yvonne McDermott of Parks sat poised at her computer to transcribe numbers. Red sheets were handed out. Birds were listed with columns for 7 park sections plus the totals. We began with Probable birds, those seen most years on this count. The numbers of individuals were small and 16 birds were not seen at all. Next we went through Possible birds, ones seen now and then but not regularly. I was amazed. None of these 10 birds was seen in any of the 7 park areas. Last of all, taking reports from each section in turn, we found out what rare birds were seen that day. Section 1 saw an American tree sparrow and 2 chipping sparrows. Section 2 saw 2 brown creepers, Section 3 saw a green-winged teal and Section

5 saw a rusty blackbird. Nice but not earth-shaking.

I urged people to take down my phone number. If they saw birds 3 days before the count or 3 days after, it would be noted for the Count Period. If they saw other birds that afternoon before they left the park, it would become part of the Christmas Count. Then I said this was my 19th year for organizing the count. Next year will be our 105th count. It will be my 20th and last as organizer. I have not checked records for the country but I don't think anyone else has done so many years for so large a crowd. Jill Mainelli said we should have a party. Sara Hobel of the Rangers said we should put out a notice that people who want to apply for the position should write in. Each person would be interviewed by a panel consisting of a representative from the Rangers, Parks, Conservancy, New York City Audubon, National Audubon, Linnaean Society and me.

Joan Weiss gave me a lift home with a lot of the cake and some wine. By that time it had stopped snowing and I wondered if anyone was still in the park looking for birds. There were! Deborah Allen left a message on my machine that she was in the Boat House. When she left with others they saw a catbird in the hawthorn tree at the edge of the parking lot. And on Pine Hill south of the Boat House and east of Bethesda Fountain she saw a Cooper's hawk. It had a dark cap, rusty bars on the breast and the feathers on the underside of the tail were stacked like shingles. She said that for both sightings there were 3 observers.

Alice Deutsch called to tell me that on December 12, she and Dorothy Poole were in the North End of the park. They saw a northern goshawk in the Loch between 9 and 10 AM. That same day they also saw a red-shouldered hawk near the Blockhouse.

Next Tom Fiore called to tell me of his marathon day in Central Park. He began at dawn and ended at dusk. Mike Freeman was with him until noon. He told me of many birds and the places and Sections he saw them: Conservatory Garden, Wildflower Meadow, Loch, Tennis Courts, Reservoir, Pines near West Drive south of Pinetum, Metropolitan Museum, Ramble, Upper Lobe, Feeders, Little Pine SW of Bow Bridge, Cherry Hill, south of west 72^d St., Zoo, and Copcat Shelter near 59th and Sixth. He saw 2 hooded merganser, 2 American coot, 1 American kestrel, 2 peregrine falcon, 50 mourning dove (at roost), 2 hairy woodpecker, 2 hermit thrush, 3 mockingbird, 1 winter wren, 1 red-breasted nuthatch, 1 gray catbird (not Debby's), 1 swamp sparrow, 4 long-eared owl, 1 saw-whet owl. All these additions seem extraordinary, but were topped by what happened mid-afternoon.

Tom went to the feeders between 2 and 3 PM. The skies had cleared after the snow and before the rain. Birds were fighting to get into the feeders and spilling seed on the ground. Hundreds of others were frantically pecking for seed in the snow. Tom looked and saw the ground covered with white-throats and house sparrows. He ran to the Boat House to tell birders but none were there. He returned to the feeders and larger birds had joined the throng. There were no grackles on the count. Now he saw 30. Earlier there were only 6 red-winged blackbirds, now 20. There were more than 60 house finch at the feeders and 4 fox sparrow. I have seen maybe a dozen American goldfinch at one time; Tom saw more than 80 at the feeders. He saw 2 pine siskin; 2 cowbird, 1 male, 1 female; 1 purple finch, either female or young male; 1 white-crowned sparrow and 1 common redpoll. I have seen few redpolls and none of them in Central Park. Tom said a red-tailed hawk was perched in a tree beside the Azalea Pond watching the feeding frenzy. Perhaps the hawk was not hungry or the birds seemed small, or the swarm made a catch more difficult. The hawk was still watching when Lincoln arrived with a fancy camera. Tom pointed to the hawk and Lincoln was there taking pictures. A pity he didn't photograph the feeders or better, there wasn't someone with a camcorder to get the sight of the year. Tom gave me 22 birds for that day; 6 added more individuals and 16 were new species we would not have had otherwise. What a gift.

Tom told me he was out with Mike Freeman and Brad Klein the day before the count. They were in the North End on top of Great Hill when they looked up and saw a flock of 4 swans flying low over their heads. Tom thought they were Tundras and went through every guide he had. He said the feathers were all white, the birds seemed slimmer than mute swans and the bills, legs and feet were all black. I thought he might have to fill out a report on these rare birds. But Dick Gershon, who heads the Lower Hudson Count, told me ID was only necessary if the birds were seen on Count Day. I wondered aloud how birds from the Northwest could be here on the East Coast. Dick explained there is a tundra swan breeding program at Montezuma refuge in upstate New York. From now on, look up and if you see swans, check twice.

Besides all the people I have already mentioned, I want to thank Bob Krinsky and Gaye Fugate for taking in address cards and money. My thanks to Gaye also for counting the cash and typing up the names and addresses of 65 people who came to count despite the weather. Their names will be published in "American Birds" for instant fame and posterity. Gaye could have spent the day inside, warm, eating delicious food and socializing in paneled rooms on Fifth Ave. Virtue, thy name is Fugate.

My thanks to everyone who helped make this year's count a success. Both the number of counters and the number of birds counted was much higher than I had expected. The figures stand up well next to last year's all-time high counts. Take a bow, birds. Take a bow, folks.

Central Park Christmas Bird Count December 14, 2003

Double-crested Cormorant 1	Red-bellied Woodpecker 20	Song Sparrow 6
Mute Swan 1	Yellow-bellied Sapsucker 4	Swamp Sparrow 2
Canada Goose 84	Downy Woodpecker 10	White-throated Sparrow 310
Green-winged Teal 1	Hairy Woodpecker 2	White-crowned Sparrow 1
American Black Duck 7	Northern Flicker 2	Dark-eyed Junco 52
Mallard 434	Blue Jay 80	Red-winged Blackbird 26
*hybrid Mallard 4 [not a species]	American Crow 3	Rusty Blackbird 1
Northern Shoveler 176	Black-capped Chickadee 1	Common Grackle 30
Gadwall 6	Tufted Titmouse 62	Brown-headed Cowbird 2
Bufflehead 16	White-breasted Nuthatch 13	Purple Finch 1
Hooded Merganser 2	Red-breasted Nuthatch 1	House Finch 72
Ruddy Duck 265	Brown Creeper 2	Common Redpoll 1
Cooper's Hawk 1	Winter Wren 1	Pine Siskin 2
Red-tailed Hawk 9	Hermit Thrush 7	American Goldfinch 84
American Kestrel 1	American Robin 90	House Sparrow 272
Peregrine Falcon 2	Gray Catbird 3	62 species 4193 individuals
American Coot 2	Northern Mockingbird 5	Birds Seen in Count Period
Ring-billed Gull 844	Brown Thrasher 1	Pied-bill Grebe 1 12/11,12
Herring Gull 593	Cedar Waxwing 23	No. Goshawk 1 12/12,13,16
Great Black-backed Gull 47	European Starling 245	Red-shouldered Hawk 1 12/12
Rock Dove 140	Northern Cardinal 53	Sharp-shinned Hawk 1 12/15,17
Mourning Dove 54	Eastern Towhee 1	Tundra Swan 4 12/13
Long-eared Owl 4	American Tree Sparrow 1	5 species 8 individuals
Saw-whet Owl 1	Fox Sparrow 10	TOTAL Count Day & Period
		67 species 4,201 individuals

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