



CENTRAL PARK CONSERVANCY INSTITUTE FOR URBAN PARKS | TRASH MANAGEMENT AND RECYCLING HANDBOOK

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14 East 60th Street
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centralparknyc.org/institute | institute@centralparknyc.org |  @cpcinstitute | 212.310.6678

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Central Park Conservancy Institute for Urban Parks—Trash Management and Recycling Handbook



Foreword

The nationwide revival of city parks over the last few decades has underscored the need for effective management and maintenance of public green space over the long term. With nearly every U.S. city investing in restoring or building parks, often in partnership with citizens' groups and nonprofit organizations, a new field of urban park management has emerged. Central Park Conservancy has been in the forefront of this effort to foster best practices, knowledge exchange, and professional development for current and future park managers.

Founded in 1980 to break the "cycle of restore and decline" in Central Park by bringing long-term planning and consistent management, supported by private fundraising and volunteer assistance, the Conservancy pioneered the model of the public-private park partnership. As part of our mission to restore, manage, and enhance the Park in partnership with the public, we aim to set the standard for world-class urban park management. Over thirty-five years of experimentation and innovation – finding out what does and doesn't work – we have developed effective strategies for every aspect of park care.

Each year, the Conservancy receives hundreds of requests from all over the world to share what we have learned. In 2013, the Conservancy launched the Institute for Urban Parks, our educational arm, in part to address this interest in our work. The Institute teaches park users and managers to care for urban parks everywhere.

As one of two centers that make up the Institute, the Center for Urban Park Management shares the Conservancy's expertise with current and aspiring park professionals to elevate the urban park management profession. The Conservancy has informally supported other parks in a variety of ways for more than three decades. The Center for Urban Park Management helps other parks by providing direct assistance and advice, formal training, and on-site support. This handbook is one of a number of resources the Center is producing to comprehensively document the Conservancy's best management practices.

In a high-profile park that is subject to enormously intensive use, the Conservancy seeks to maximize public enjoyment of Central Park while maintaining important historic, environmental, and aesthetic values. That challenge is vividly illustrated in the evolution and current practices of the Conservancy's trash management program, as detailed in this handbook. We have learned a great deal from our experiences caring for Central Park and are pleased to share this knowledge through the publication of this handbook and dissemination of additional resources available through the Center for Urban Park Management.



The Importance of Managing Trash in Urban Parks

The *Central Park Conservancy Institute for Urban Parks –Trash Management and Recycling Handbook* is a tool for urban park managers who are developing trash management strategies. The handbook traces the evolution of trash removal and recycling in Central Park and details the Conservancy's current comprehensive, sustainability-based system. The basic principles and practices presented in this handbook can be adapted to fit other urban parks despite differences in size, use, budgets, staff, or volunteer capacity. The first and most important job of urban park managers is keeping the landscape clean. A trash-strewn park spoils visitors' enjoyment and triggers a litany of other problems. It gives people license to litter, attracts pests that degrade natural ecosystems, and creates an ambience of neglect that invites criminal behavior. "You can restore a beautiful landscape, you can fix up a great building, but if there's trash on the ground, it doesn't matter. People will only see the trash and they don't like a dirty park," said Douglas Blonsky, President & CEO of Central Park Conservancy and Central Park Administrator. Conversely, a spotless landscape showcases a park's natural beauty.



When a park maintains high standards for cleanliness, visitors respect it. For these reasons, the Conservancy makes trash removal a top priority.

Managing trash in Central Park is a complex challenge. The Park currently receives over 42 million visits a year and 115,000 visits on an average day. Its 843 acres encompass a wide variety of landscapes and uses, from quiet woodland habitats to tourist-packed Bethesda Terrace. People come to jog, bicycle, stroll, walk dogs, picnic, relax on the lawns, watch performers, take children to the playgrounds, and see the world-famous sites. They participate in 45 athletic leagues and 1,500 permitted events per year, including major concerts, company picnics, and parties. The water bottles, soda cans, pizza boxes, ice cream wrappers, newspapers, and other trash they leave behind add up to over 2,000 tons a year.

It has taken the Conservancy more than three decades of trial and error to arrive at an optimal system for managing all of this trash. Compared to the cost of restoring the Park, a relatively small amount went to trash management, but “the results were huge,” said Blonsky. Two principles have driven the development of the system: a “zero tolerance” standard for trash in the landscape and a “carry in, carry out” ethos that aims to eliminate trash disposal and collection activity from the interior of the Park. Even now, with the Conservancy’s most comprehensive strategy to date, trash management remains a work in progress as visitor numbers – and public expectations for the cleanliness and beauty of the Park – continue to rise.



CHAPTER 1

The Evolution of Trash Management in Central Park

The Conservancy was founded in 1980 to raise funds for the consistent management of Central Park. The near bankruptcy of the City of New York earlier in the decade triggered steep and sustained cuts to Park maintenance and enforcement budgets. At the same time, a loosening of Park rules allowed more intensive uses, including protest rallies, giant concerts, barbecuing, and unrestricted sports. The combination of overuse and neglect turned lawns into dustbowls. Weeds invaded gardens and woodlands. Graffiti and vandalism scarred buildings, bridges, and monuments, and danger seemed to lurk in every secluded spot. Almost everything needed repair: benches, fences, lights, drinking fountains, playground equipment. But the most visible sign of the Park's decline was the litter blanketing the Park seven days a week.

The Conservancy began undertaking major capital projects and landscape restorations, including Sheep Meadow, the Conservatory Garden, the East Green, and the Great Hill. Yet trash remained a huge frustration. "We would have a beautiful, restored landscape and it would still be covered with trash," recalled Blonsky. "Or if the landscape was not full of trash, the approach to it was. Coming into the southwest corner of the Park, all you would see was litter, and that was what your experience would be."

After a summer weekend, staff typically needed until Thursday or Friday of the following week to clear away trash. Garbage trucks regularly broke down, and repairs, which were administered by the New York City Department of Parks & Recreation (NYC Parks), took months. When only one truck was in service, staff would actually dump garbage inside the Park, piling it on pavement for eventual transport to the landfill. Trash receptacles – 55-gallon steel oil drums – were scattered throughout Park landscapes and in the middle

of lawns. Staff had to drive garbage trucks across the grass to empty the heavy, unlined receptacles. "As the Park's managers, we were doing more damage to the lawns than the general public," said Blonsky.

Beginning with the restoration of the Sheep Meadow in 1981, the Conservancy's first trash management efforts focused on removing trash collection from the landscape. Guided by a "carry in, carry out" credo, the Conservancy relocated trash receptacles from inside the lawn to the entrances and surrounding paths. This kept vehicles off the grass, reduced rodent problems, and eliminated the sight and smell of trash and the disruption of collection activities. Over the following years, with each subsequent renovation of a woodland, playground, athletic field, or major lawn, trash receptacles were moved from the site's interior.

The Conservancy also introduced new trash receptacles, replacing the rusting and dented oil drums with more attractive wire mesh baskets. This was the first of several receptacle styles the Conservancy tried over the years as its trash management strategies evolved. The wire baskets ultimately proved unsuccessful: rodents and raccoons easily climbed up the latticed sides and into the open tops, and the wire mesh didn't hold up to repeated emptying.



Graffiti-covered Belvedere Castle, early 1980s.



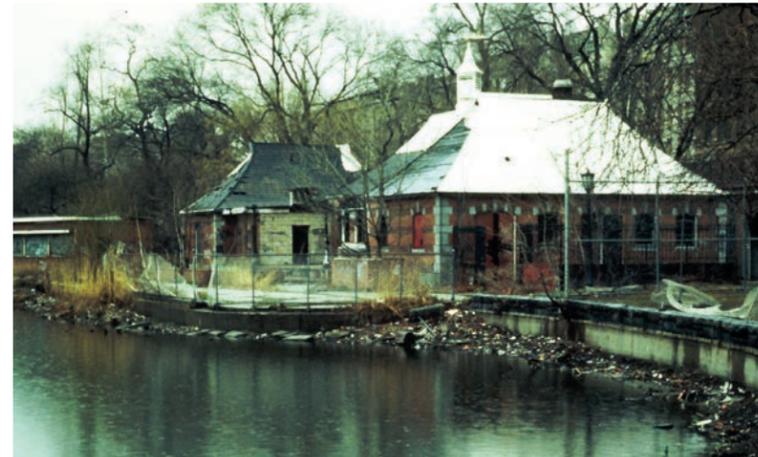
The Naumburg Bandshell plaza, early 1980s.



Previously, garbage trucks drove on Sheep Meadow to remove litter and empty receptacles.



Litter from the Barbra Streisand concert, Sheep Meadow, June 1967.



The Harlem Meer, early 1980s.



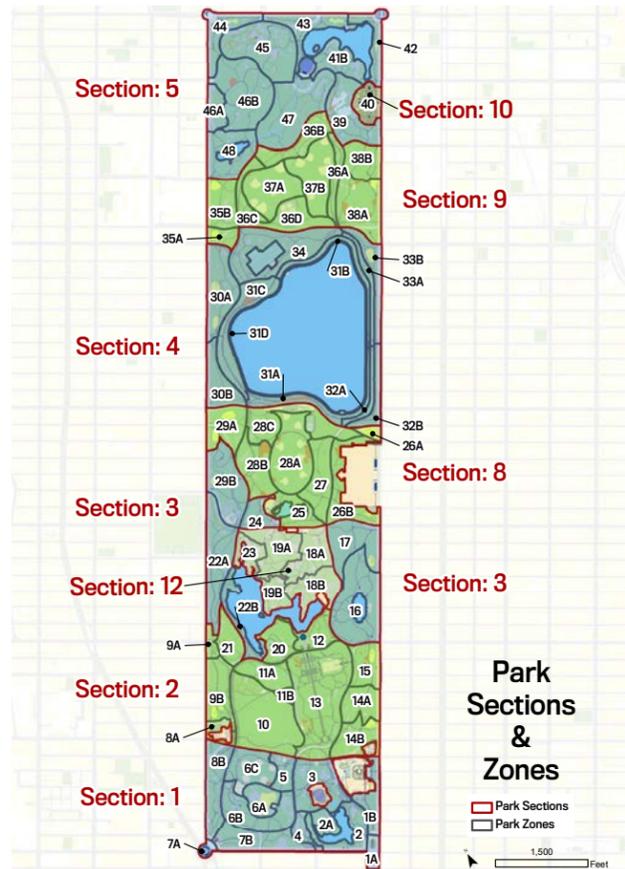
Trash receptacles scattered throughout Park landscapes.



Trash blanketed landscapes, including the southwest corner of the Park.



A wire mesh basket trash receptacle at Conservatory Water.



Zone Management System map.

Innovating for a Cleaner Park

After the Conservancy assumed responsibility for the Park's day-to-day maintenance and operations in the mid-1990s (a role that was formalized in 1998 through a management agreement with the City), it introduced numerous staffing and trash management changes that significantly improved the effectiveness of collecting trash in the Park.

The first and most important step was the implementation of the Zone Management System. Implemented Parkwide in 1995, the system parceled the Park into 49 distinct areas called "zones," each with a Zone Gardener responsible for all upkeep – including trash removal – in that specific set of landscapes. This system, together with a "zero tolerance" policy for trash initiated after the Great Lawn renovation, made staff accountable for keeping their particular part of the park clean.

"We knew it would be a real challenge," said Blonsky, then the Conservancy's Chief of Operations, "but eventually it would get better." At that time, approximately half of the workers in the Park were employed by the NYC Parks and half were employed by the

Conservancy. NYC Parks employees worked in roving crews and were not accustomed to being held accountable for maintenance results in defined locations. Conservancy staff, on the other hand, only took care of plantings and infrastructure. They were not used to, or as interested in, picking up trash. At first, it took staff five to six hours a day to remove trash from their zones, most of an eight-hour shift. Over time, however, the task became manageable. Staff became more efficient as they learned the daily and seasonal Park use trends in their zone. A cleaner park discouraged littering, and when patrons saw the same person working in the same area every day, they became less likely to drop trash on the ground.

Within a few years, however, the growing number of Park visitors led to ever-increasing amounts of garbage, most of it accumulating in the afternoon and evening after the horticulture staff went home. Gardeners were spending so much time cleaning up from the night before that they didn't have enough time for essential horticultural tasks. In 1998, the Conservancy added a Night and Weekend Operation to handle trash removal during the Park's busiest times.

Another innovation was the mechanization of trash collection. In 1994, the Conservancy switched to using garbage trucks that mechanically lifted and dumped plastic bins, relieving drivers of an arduous task. The 68-gallon bins – called "toters" – could also hold more trash. Toters were housed in metal enclosures, considered attractive at the time, along paths, outside playgrounds, in highly visited sections, and away from lawns. However, this system still required drivers to steer garbage trucks through crowded pedestrian paths inside the Park. And when trucks broke down, which they often did, the toters filled faster than staff could empty them.

One of the biggest trash management challenges in the Park was the huge amount of garbage generated by special events. Following large concerts, Conservancy staff would be cleaning up for days. After the Garth Brooks concert in 1997, the adoption by NYC Parks of a "carry in, carry out" policy for special events gave the Conservancy better control of the situation. NYC Parks began requiring event organizers, through the permit process (and in consultation with the Conservancy), to manage and remove all trash and recycling generated by their events and to leave the space litter free. Organizers frequently work with NYC Parks and the Conservancy to facilitate trash management for their events, and NYC Parks and the Conservancy staff always perform a final inspection and cleanup afterwards.

Keeping Pace with Growing Visitation

As Park attendance continued to swell and paths became more crowded, staff found it difficult to maneuver garbage trucks. This created an increasingly unsafe environment for both Park patrons and staff, and slowed trash pickup. In the mid-2000s the Conservancy revamped its trash collection methods again. It gradually changed over to a predominantly manual collection system, using 32-gallon movable toters lined with plastic bags. Staff collected the bags in small utility vehicles and brought the bags to designated drop-off spots on Park drives and the wider paths for garbage trucks to pick up. Although the large toters in fixed enclosures remained in place, the smaller toters alleviated the need for garbage trucks to continuously empty the large ones.

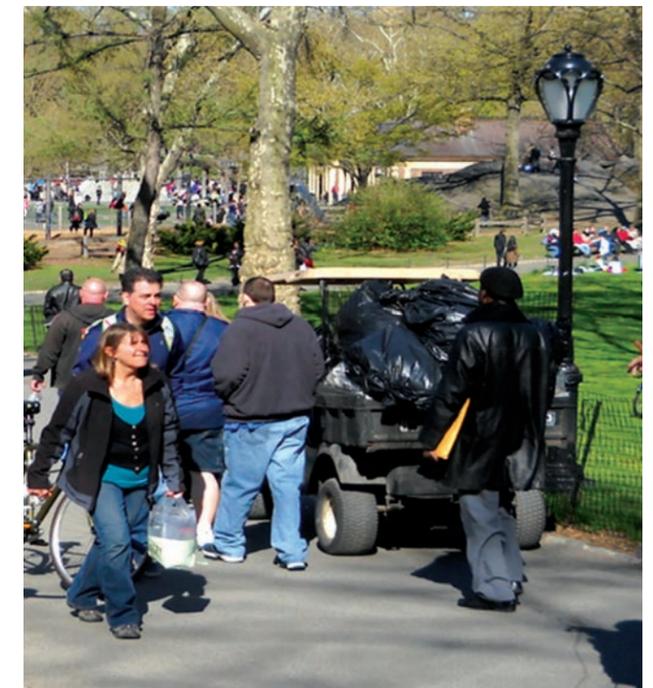
The Conservancy also began extending garbage truck operation into the evening. Up to this point, NYC Parks garbage truck drivers, working mostly during the day, were responsible for picking up all trash from the Park and carting it to the City of New York Department of Sanitation transfer stations. At night, only a two-person crew removed trash along the Park drives, with limited efficiency. Now that an established Night Operations staff was collecting increasing amounts of trash in the afternoon and evening, bags began to accumulate at drop spots toward the end of the day. In 2005, the Conservancy started assigning its own staff to drive garbage trucks and remove trash for several hours every night. A full night shift for garbage pickup and disposal was established in 2012.



Toters filled with trash faster than staff could reach with the garbage trucks to empty.



Toters were emptied with a mechanized lift system on the garbage trucks.



Utility vehicles drive on crowded Park paths.



Recycling totes for cans and bottles were placed beside existing trash receptacles.

In 2007, the Conservancy introduced recycling with a pilot program around the perimeter of the Great Lawn, using blue totes for cans and bottles. Similar totes for paper recycling were added in 2008, and the program eventually included all of the Park's athletic fields, the Mall, the Naumburg Bandshell, Bethesda Terrace, and the Shakespeare Garden. By 2010, visitors could recycle throughout the Park.

All along, the number of visitors – and the volume of trash – continued to rise, requiring staff to devote more time to trash pickup. Meanwhile, the Conservancy continued to restore lawns, woodlands, and gardens, increasing the need for regular horticultural maintenance. To allow Zone staff more time for horticultural tasks and ensure staff were in the Park on the weekends when it is busiest, the Conservancy replaced supplemental seasonal positions with a smaller number of full-time Grounds Technicians who were primarily responsible for trash management.

Creating a Comprehensive and Sustainable Strategy

By 2012, the annual number of visits to Central Park had increased to over 40 million, up from 13 million in 1980 and 20 million in 2000. Ever-more-crowded paths restricted access for even the smallest utility vehicles and increased the risk of collisions with pedestrians. Staff often couldn't reach receptacles and drop spots before they overflowed with trash. At the same time, the Conservancy continued to raise the bar for cleanliness and environmental sustainability in the Park.

With support from Alcoa, Inc. and the Alcoa Foundation, the Conservancy undertook a comprehensive analysis of trash collection in the Park in 2012. Everything was open to reconsideration, including the vehicles used and whether to dispose of trash and recyclables through the City's Sanitation Department or a private carter. Operations Directors and Zone staff spent months reorganizing receptacle locations and collection routes.

To facilitate the new strategy and generate public interest in the program, the Conservancy developed a set of new trash and recycling receptacles – the Central Park Recycling System – designed to make trash disposal and recycling easier, reduce the presence of rodents, and harmonize with the Park's aesthetic. (The aluminum used to craft the new receptacles was also provided by Alcoa.)

The system launched in 2013 with 700 strategically placed receptacles, including 200 for recycling, at Park entrances, drives, major intersections, and other high-traffic areas. It reduced the number of receptacle sites and relocated sites that were still inside landscapes. For example, at Strawberry Fields, receptacles sandwiched between the benches surrounding the "Imagine" mosaic and set along paths were moved to the Strawberry Fields entrances near West 72nd Street and the West Drive. The system eliminated trash bag drop spots (and garbage trucks) from pedestrian paths and consolidated collection locations along the Park drives.



Garbage trucks remove trash bags from drop spot locations along Park drives.



The Conservancy's trash and recycling receptacles, 2015.



Zone staff makes trash removal a top priority.

The Conservancy expected that it would take time for visitors to adapt to the system – especially dog owners and ball players accustomed to tossing dog waste or water bottles in a nearby receptacle. As with every restoration, renovation, or enhancement in the Park, good communication with the public was key. The Conservancy created an informational campaign to explain how to use the new receptacles and encourage visitors to help make the Park cleaner and greener.

Under the new program, staff can remove trash efficiently without compromising visitor safety. Garbage trucks drive only on Park drives. Recycling numbers are up 20 percent, and visitors are less likely to mix trash with recycling. The new receptacles fit gracefully into the Park's design. Anecdotal evidence suggests that the removal of trash receptacles from woodlands, together with the ongoing restoration of native plants, has increased Park biodiversity by reducing populations of rodents that compete with other wildlife for food and habitat.

Trash Management Timeline

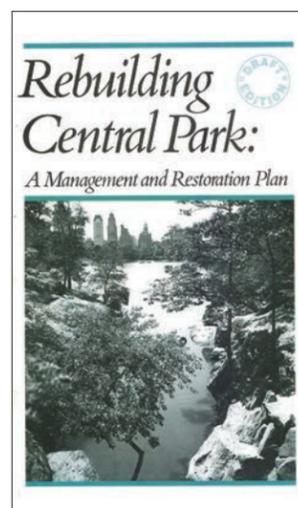


1980

Central Park Conservancy is founded. (Above: Edward Koch, Mayor, City of New York; Elizabeth Barlow Rogers, the first Central Park Administrator and Conservancy Founder; Gordon Davis, Commissioner, New York City Department of Parks & Recreation.)

1981

The Conservancy finishes its first major lawn restoration, of Sheep Meadow, and relocates trash receptacles (oil drums) to paths surrounding the lawn, the first implementation of the “carry in, carry out” policy.



1985

A trial of the Zone Management System begins with the hiring of the first Zone Gardener responsible for maintaining a specific area, the newly created Strawberry Fields.

The Conservancy completes *Rebuilding Central Park: A Management and Restoration Plan*, a comprehensive blueprint to guide the restoration and management of the Park.

1985 - 1991

With the restoration of major landscapes, including the Great Hill, the Mall, and the North Meadow, the Conservancy moves trash receptacles off of lawns and horticultural landscapes, and places them on paved paths. Wire mesh baskets replace oil drum receptacles.

1994

A new system using 68-gallon toters emptied into garbage trucks with a mechanized lift replaces the manual dumping of wire mesh baskets.

1995

The Conservancy implements the Zone Management System Parkwide. In a departure from crew-based management, the Conservancy divides the Park into 10 sections and 49 zones, and reorganizes existing horticulture staff so that every zone has a Zone Gardener who reports to a Section Supervisor. This introduces accountability for daily maintenance, including trash removal, at the level of individual landscapes.

All remaining 55-gallon oil drums are removed from Central Park.

1997

After the Garth Brooks concert at the East Meadow in August, NYC Parks (with the support of the Conservancy) requires event organizers to remove all trash and materials generated by an event.

The “carry in, carry out” policy is brought to the Great Lawn.



1998

The City of New York, NYC Parks, and the Conservancy sign an agreement formalizing the Conservancy’s responsibility for maintenance and administration of Central Park.

1998 - 2000

The Operations Department adds Night and Weekend staff to focus on trash management during the Park’s busiest times.

Toters are positioned at the entrance gates outside all 21 Park playgrounds, and in specific locations including major entrances and high traffic areas, another “carry in, carry out” location. “Carry in, carry out” is also expanded to North Meadow.

Smaller 32-gallon toters lined with plastic bags are used throughout the Park on paths and to supplement existing receptacles during peak use times.

The Conservancy-designed ornamental cast iron enclosure is integrated into the trash management program.

2005

Night Operations begins assigning staff to operate garbage trucks for several hours each evening.

2007

The Conservancy introduces recycling for cans and bottles at the Great Lawn.

2008

Relocation of trash receptacles out of Central Park woodlands begins, another “carry in, carry out” location.

2008 - 2009

Recycling expands to all athletic fields in the Park, and includes paper. The Conservancy places recycling receptacles in select locations including Bethesda Terrace, the Bandshell, and the Shakespeare Garden.

2010

Recycling is implemented Parkwide.

2012

Night Operations establishes a full shift of garbage truck operators for pickup and disposal of trash during the afternoon and evening.

The Conservancy begins substituting seasonal positions with full-time employment for Grounds Technicians, who are primarily responsible for trash collection, including on weekends.

2013

In partnership with Alcoa, Inc. and the Alcoa Foundation, the Conservancy introduces the Central Park Recycling System, the centerpiece of a new comprehensive trash management plan that strategically relocates receptacle sites to enhance Park safety, reduce rodents, and promote recycling Parkwide.

2015

Pest populations have decreased throughout the Park. As a result, the Eastern Chipmunk has returned to the North Woods. Recycling rates have increased across the Park by 20% on average.

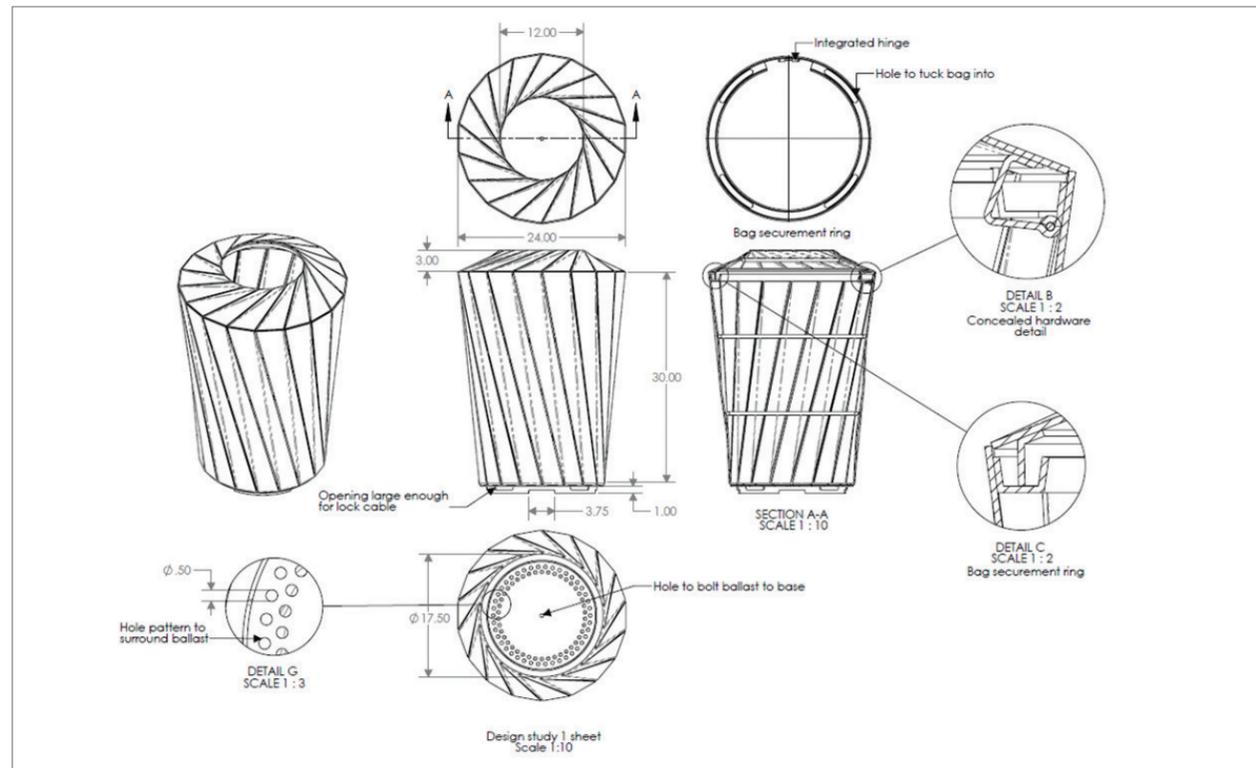




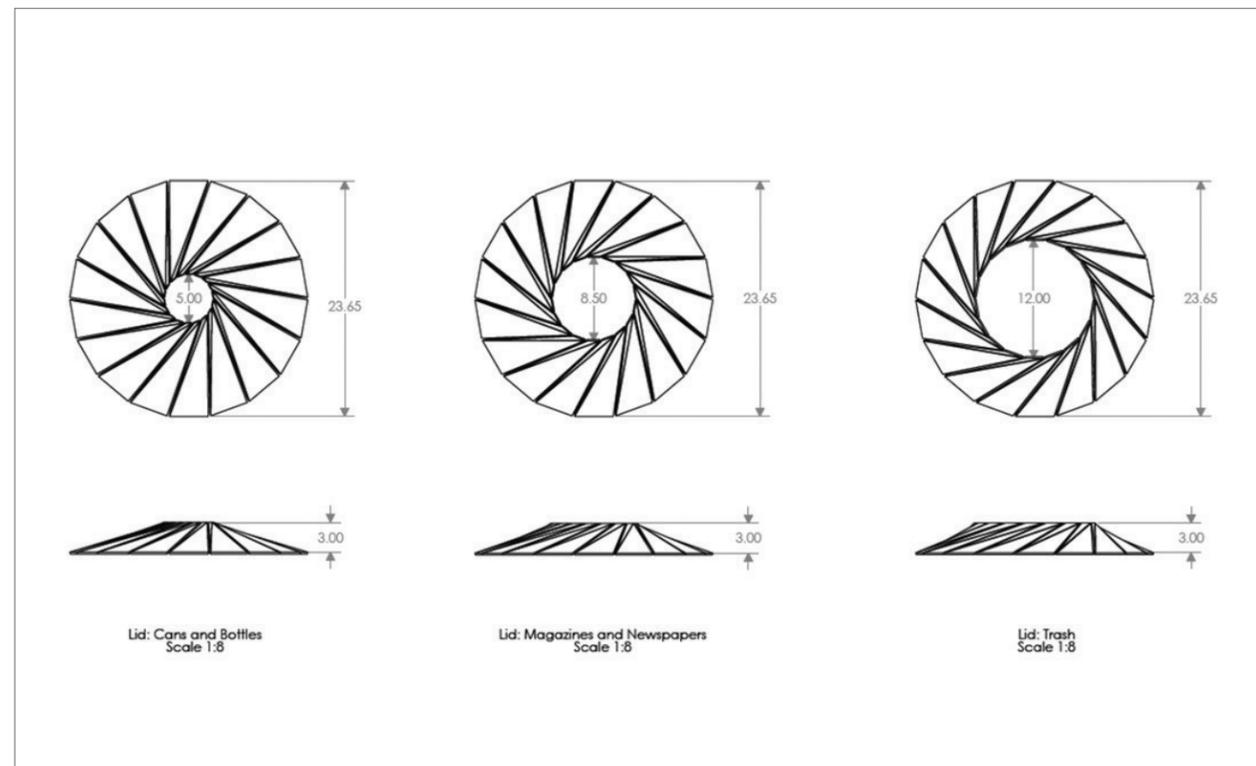
CHAPTER 2

Central Park Conservancy's Trash Management Plan

As detailed in the previous section, the Conservancy created a comprehensive new strategy in 2012. The plan was based on an analysis of every aspect of trash collection in light of clearly defined priorities: enhancing safety; maintaining landscapes; encouraging stewardship and Park care; controlling rodents; and advancing “carry in, carry out” where possible. The plan encompasses trash and recycling receptacle design; receptacle placement; collection logistics; public education, and environmental stewardship. The remainder of this section provides additional detail on the components that make up the plan.



Features of the receptacle design include a hinged lid and drainage holes at the base.



Aperture openings of the receptacles indicate proper disposal.



The receptacles for trash have the widest opening.

Receptacle Design

A new set of disposal receptacles – the Central Park Conservancy Recycling System – improve trash and recycling removal and serve as an icon of the Park’s sustainable trash management. In developing the design, the Conservancy researched visitor use, sought staff input, reviewed technology and industry standards, and developed branding guidelines. The Conservancy selected the industrial design and communications firm Landor Associates to create a durable, sustainable, pest-resistant, easy-to-use, and attractive receptacle, and chose Landscape Forms to engineer and manufacture it.

The design for the receptacle incorporated a number of elements that facilitate the trash management program and further sustainability goals. Inspired by the 1930s “World’s Fair Bench” used throughout the Park, the design features curving aluminum slats. It differentiates for trash, cans and bottles, and newspapers and magazines by color, size of opening, and labeling. For ease of manual collection, the receptacle accommodates a standard 32-gallon trash bag, and has a hinged top for opening and closing. (The hinged lid also allows “urban miners” – foragers who gather bottles and cans to reclaim deposits – to get access without dumping trash on the ground or damaging receptacles.) Rodent-resistant features include small top openings, minimal spaces between slats, and drainage holes the size of a dime at the bottom. The 40-pound receptacle is made of 30 percent recycled aluminum and is 100 percent recyclable at the end of its use. To enhance awareness of the Conservancy’s work in maintaining the Park and caring for the environment, the design is consistent with the Conservancy brand, colors, and typography style.

Receptacle Placement

The Conservancy determined where to place receptacles based on a visitor use and trash generation, pest control considerations, and efficiency and ease of collection. By strategically relocating trash collection away from landscapes and internal paths to major Park entrances, path intersections, Park drives, and high-traffic areas, the new system takes another step towards the Conservancy’s objective of “carry in, carry out.” After testing receptacle locations for a year, the Conservancy made them permanent. It integrated the sites into the Park’s design with paved footings and cutouts, edged with fencing or stone curbs, similar to the treatment for many of the Park’s benches.



Paved footings edged with cobblestones for the receptacle sites integrate them into the Park’s design.

Collection and Disposal Process

Along with the reorganization of disposal sites, the Conservancy changed the collection process to make it safer and more efficient. The new strategy expands manual collection to all sites in the Park's interior and uses utility carts to transport trash bags from receptacles to drop spots on Park drives. The more manually intensive process required additional staff. Garbage trucks, almost entirely restricted to Park drives, continuously pick up trash bags from these locations. Separate vehicles collect recycling on average twice per day. The number of drop spots was reduced from 12 to 8 to reduce the potential for pest infestations. After considering various options, including private carters, the Conservancy decided to continue using the City's Sanitation Department to handle trash and recyclables for disposal or processing.



Previously, garbage trucks drove on narrow paths to remove trash.



Eight drop spots throughout the Park are located along Park drives.

Public Education

To encourage use of the new receptacles, address complaints, and promote recycling, the Conservancy developed a broad-based communications strategy, guided by focus groups with Park visitors. Signs at receptacle sites, Park entrances, and busy intersections explain the system, emphasizing how Park visitors can make a difference by recycling. To minimize contamination, concise receptacle labels (in English only) indicate the most commonly discarded items: "newspapers and magazines" for paper; "bottles and cans" for plastic and metals; and "trash"—the word for garbage with the most positive connotations for focus group participants. The Conservancy developed talking points and trained staff to convey a clear, consistent message emphasizing the benefits for Park visitors: RSR – (fewer) Rats, Safer paths, (more) Recycling.

Relationship building with community organizations, such as athletic leagues, schools, and dog owners, also built support for the new trash management system. The Director of Community Relations meets regularly with these groups to enlist their participation and encourage them to carry out the trash they generate in the Park. Over several months, as the trash management system went into effect, Operations staff listened to visitor concerns and explained the plan's benefits. This kind of sustained engagement reversed the initial reluctance of dog owners to support the program. The Conservancy also provides operations staff with talking points for communicating with the dog-owning community on a day-to-day basis.

Environmental Stewardship

The trash management plan reduces the environmental impact of Park operations by boosting recycling and using receptacles made of recycled and recyclable materials. In addition to everything the Alcoa Foundation did in support of the plan, it also donated four electric utility vehicles, which produce no emissions. Communications encouraging visitors to recycle and help the environment raise public awareness that sustainability is an important Conservancy value and goal.



Labels on the receptacles assist Park visitors in properly disposing items.

Keeping Your Park Clean and Green

Central Park Conservancy has increased recycling in Central Park with unique new trash and recycling cans. These specially designed cans were inspired by the Park's iconic benches.

The Conservancy handles over 2,000 tons of trash each year.
Learn more at centralparknyc.org/trash



Black can:
Trash and food containers



Gray can:
Plastic and glass bottles, and cans



Green can:
Newspaper and magazines

Supported by 



**CENTRAL PARK
CONSERVANCY**
central to the park



NYC Parks

"Keeping Your Park Clean and Green" sign.



CHAPTER 3

Trash Management Principles

The mission of the Conservancy is to restore, maintain, and enhance Central Park in partnership with the public. Through its trash management plan, the Conservancy aspires to the highest level of stewardship of the Park's historic, aesthetic, and natural values, starting with zero tolerance for trash in the landscape and an objective of moving as much trash disposal as possible to the outside of the Park. The Conservancy's trash management practices are guided by the following organizational principles:

10 Principles for Successful Trash Management

1 | Put safety first

Ensuring the safety of visitors and staff has motivated the Conservancy to develop trash management strategies that minimize vehicle traffic on busy paths. To make sure work is conducted safely, the Conservancy trains and supervises staff to follow proper procedures for driving vehicles, operating equipment, and collecting trash.

2 | Promote a mindset of zero tolerance for trash

One overriding objective drives the Conservancy's trash management plan: no trash in the landscape. Staff receives thorough training and supervision to meet exacting standards for cleanliness and timely trash removal. Everyone – not just Operations staff – picks up trash when he or she sees it.

3 | Make trash management the top priority

The first and foremost responsibility of Zone staff is emptying trash and recycling receptacles and picking up litter. Trash removal is a top priority for day staff and the primary focus of the Night Operations staff. Throughout the day and evening, Supervisors monitor the Park to make sure it is clean.

4 | Manage for accountability

The Conservancy promotes accountability for the cleanliness of the Park through its Zone Management System, in which specific staff members are assigned to maintain and manage trash in defined areas. Because a spotless zone directly reflects on the effectiveness of the staff assigned to that area, Supervisors can easily assess results and provide support and assistance when needed.

5 | Foster a culture of dedication and teamwork

Through a culture that supports teamwork, a sense of purpose, and satisfaction in a job well done, the Conservancy nurtures a staff that works hard at trash management. The Zone Management System fosters a sense of accomplishment. An organizational culture that encourages staff to take initiative and pitch in when needed helps maintain high standards of cleanliness while distributing work fairly. For example, a Grounds Technician who spots litter in an area that is not his or her responsibility will pick it up anyway, or make sure that someone else does. Or if one zone is overwhelmed with trash on a given day, staff from nearby zones will lend a hand.



6 | Monitor regularly

Supervisors routinely monitor conditions throughout the Park to make sure staff completes tasks and to troubleshoot problems. For example, if a Grounds Technician gets tied up helping a Park visitor or a garbage truck breaks down, Supervisors can quickly bring in additional staff and keep trash from piling up.

7 | Plan ahead

Every day is different at Central Park, but there are daily, weekly, and seasonal patterns of trash accumulation. The Operations department schedules staff work hours and organizes trash removal to provide coverage at peak times. Planning ahead is especially important for special events to make sure receptacles, garbage trucks, staffing, and systems are in place for the rapid removal of large amounts of trash.

8 | Partner with the public

The success of a trash management plan ultimately relies on a strong partnership with the people who use and support the park. The Conservancy motivates visitors to take good care of the Park through a variety of communications, including one-on-one conversations with Zone staff, Park signs, and outreach to community groups.

9 | Strive for sustainability

The Conservancy weighs environmental impacts in making decisions about maintenance and operations procedures. The trash management plan provided the opportunity to expand recycling, reduce pollution and energy use, and communicate organizational values related to the environment and sustainability.

10 | Work towards "carry in, carry out"

Ultimately, the most effective and environmentally sound way to manage trash in parks is to encourage visitors to take everything with them when they leave. Many national and state parks follow this policy, which results in lower costs, fewer environmental impacts, reduced pest infestations, and cleaner landscapes. Minimizing trash removal in the Park allows the Conservancy to focus resources appropriately on horticultural care, facility maintenance, and visitor programs.



CHAPTER 4

Trash Management Practices

Within the framework of its trash management program, the Conservancy employs a number of specific practices for collecting trash and keeping the Park clean, both on a daily basis and for special events and uses. Grounded in the Conservancy's basic principles for trash management, these practices include effective approaches to planning, supervision, public communication, and on-the-ground trash removal. The Conservancy has honed them over many years to make trash collection safer and more efficient, while minimizing its impact on visitors' enjoyment of the Park.



Zone staff brings trash bags to drop spots for pickup by the garbage trucks.

Day-to-Day Trash Management

Daily trash management in Central Park is an organized effort between day and night shifts seamlessly providing 24-hour coverage. From 7:00 am to 3:30 pm, Zone Gardeners, Groundskeepers, and Grounds Technicians assigned to 49 zones are responsible for trash management in their specific locations. Their first daily task is emptying receptacles and picking up trash on the ground. Throughout the shift, they handle myriad horticultural tasks while making sure that receptacles are emptied and the landscape remains litter free. Night Operations takes over between 1:30 pm and 10:00 pm (12:30 pm and 9:00 pm in the winter), and an overnight shift runs from 10:00 pm to 6:00 am. Night Operations staff is assigned to 19 areas, which are larger than horticultural zones and purposefully referred to as “areas” to distinguish them from “zones.” Each area has a Parkwide Technician or Grounds Technician whose primary task is trash management. (They also handle a variety of other tasks, including closing playgrounds, lawns, and bathrooms at night, removing snow, and mending fences.) Parkwide Technicians oversee larger areas; they manage trash removal when the Grounds Technician is busy elsewhere, pick up litter, and respond to situations that require specialized training. The Supervisor of Night Operations monitors Park conditions throughout the shift, driving a systematic route around the Park to make sure that trash removal is flowing smoothly. Night Operations has a full staff on weekends and holidays, with days off during the week. All staff working in the field, day and night, regularly interacts with Park visitors to provide directions, answer questions, pass out bags to encourage picnickers to carry out their trash, and educate the public on trash disposal rules.

Before beginning to work in the field, staff members go through a week or more of on-the-job training covering the details and priorities of the zone or area. They learn the busiest locations,

the most efficient routes for collecting trash, and the types of situations typically encountered. Each staff member develops his or her own routine for trash removal, while juggling a variety of other basic duties and interacting with the public. It is important to keep moving and be ready for unexpected situations, which come up daily. The goal is to maximize productivity to keep each area as clean and neat as possible, without any one person taking on more than his or her share of the work.

While staff empties receptacles and brings bags to the drop spots, garbage truck drivers operate in continuous motion around the Park drives and the streets along the Park perimeter. They pick up bags at drop spots and when trucks fill up, drive to a Sanitation Department transfer station. Drivers work in four overlapping shifts (7:00 am–3:30 pm, 10:00 am–6:30 pm, 1:30 pm–10:00 pm, and 3:30 pm–12:00 am), so that all garbage at drop spots can be collected by the end of the day. During the peak hours of 3:00 pm to 8:00 pm, there are up to three trucks in circulation operated by three to six staff. From the first task of the day – emptying receptacles along the Park perimeter – drivers plan their routes, time their trips to Sanitation Department transfer stations, and remain alert to what is happening in the Park to make sure trash does not accumulate. To maintain accountability, drivers note each pickup location and time, and Operations Supervisors monitor daily mileage, the number of trips to Sanitation Department transfer stations, and the weight of trash collected. Drivers carry radios, which enable them to respond to Park situations and emergencies. The drivers become familiar with runners, dog walkers, and other regular users, and are often the first to notice issues in the Park.

Following are the trash management practices the Conservancy has developed that keep trash disposal moving smoothly and maintain the Park at a high standard of cleanliness.

CHECKLIST Trash Management Practices

Manual Collection and Litter Removal

- Start the shift by removing trash in landscapes and emptying receptacles.
- Maximize productivity with good time management. Start with a quick overview and clean the most visible trash first; prioritize areas that generate the largest amount of trash.
- Inspect carefully and strive to keep landscapes clean to a high level of detail, removing even small items like cigarette butts.
- Set up the next shift with empty trash receptacles and clean landscapes.
- Maintain continual trash collection through all seasons and weather.
- Check known problem spots that could attract pests. These tend to be overgrown or isolated areas out of regular view.
- Include the Park perimeter in clean up and trash disposal – it is where visitors get their first impression.
- Bring pest infestations to the immediate attention of the Supervisor and Integrated Pest Management Coordinator.
- Sweep receptacle sites and clean receptacles. A clean, well-maintained set of receptacles encourages correct and regular use.
- Incorporate horticultural maintenance to address problem spots, such as pruning overgrown plantings where people can hide trash.

Public Interaction

- Assist Park visitors and take a positive and friendly approach to trash disposal and regulations.
- Develop relationships with regular Park users likely to generate trash, such as dog walkers, vendors, or school groups, to help them understand that proper disposal benefits everyone.
- Provide trash bags as needed to picnickers or dog walkers to assist them in trash disposal.



Garbage Truck Operation

- Make safety the top priority. Drive slowly and be constantly alert for pedestrians, runners, bicyclists, off-leash dogs, other vehicles on the drive, and any other risks. Drivers wear reflective vests and are trained to properly pick up bags.
- Recognize patterns of Park use to time pickups and disposal at Sanitation Department transfer stations. Schedule trips at slow times, if possible.
- Monitor how full trucks are throughout the day and empty strategically, so trucks can begin collecting immediately during the busiest hours.
- Get to transfer station before the closing time to empty truck for the night’s final trip to collect remaining bags at drop spots.
- Pay attention to visitors and events in the Park. Notify the Supervisor when situations need immediate attention, such as safety issues, emergencies, large amounts of trash, or overflowing receptacles.



Central Park Conservancy Ice Festival, 2015.

Trash Management for Events and Special Uses

One of the biggest management challenges for urban parks is the trash generated during large events and gatherings. Nothing gives the impression of a neglected park more than mounds of trash spilling out of receptacles and litter in the landscape days after an event. The Park hosts nearly 1,500 permitted events a year, from the Great Lawn concerts with 60,000 attendees and the New York City Marathon, to company and school picnics, to weddings and birthday parties. Events in the park include athletic, City-sponsored, promotional, or charitable gatherings by outside companies or civic organizations and public or Conservancy-sponsored events. For all gatherings of 20 people or more, permits are required, issued by NYC Parks Permits office in consultation with the Conservancy. Permit holders are subject to NYC Parks Rules and Regulations governing how specific Park spaces may be used.

For every event, NYC Parks and the Conservancy develop a plan that addresses a variety of contingencies to make sure the Park is clean and available for the public to use the following day. Success depends on good advance planning; continual trash removal and litter cleanup – during load-in, setup, the actual event, and immediate post-event cleanup. Waiting until an event ends to tackle trash removal can lead to days of cleaning up.

For events in the Park, the event organizer is responsible for its own trash collection. NYC Parks requires a citywide “carry in, carry out” policy for all permitted events. Organizers of

events with over 500 participants, or events of a promotional or commercial nature, must have a detailed trash management plan. NYC Parks and the Conservancy review the plan, and may require revisions prior to approving the permit. Event organizers know that the Park will be clean when they arrive and that they are expected to leave it in the same condition when their event is over.

The Conservancy and NYC Parks facilitate trash management for public events including parades and the New York Philharmonic concerts, as well as Conservancy-run events such as fundraising receptions. Throughout an event, staff is assigned to specific sections of the affected Park area. Staff removes bags from receptacles, picks up trash on the ground, and places the bags in pre-determined locations. Garbage trucks stand by to ferry trash to Sanitation Department transfer stations.

Concessions and Other Special Uses

Food and beverage concessions are another source of trash-related challenges if not managed effectively. These uses are governed by contracts with NYC Parks that impose stringent trash management requirements. Concessionaires are responsible for removing trash and recycling from their sites, and for cleaning the 50-foot radius surrounding their facility. Film crews also generate trash during the duration of their event and are required to keep the filming location clean throughout the shoot and to remove all materials from the Park, including trash and recyclables, at the end of the shoot.

CHECKLIST Special Events

Advance Planning

- Review permits for large events to make sure the trash management strategy is adequate for the expected crowd.
- Require quick and thorough trash removal to minimize litter and prevent rodent infestations.
- Temporarily place additional receptacles in the area scheduled for an event.
- Address recurring trash management issues resulting from activities of local groups, such as school outings. The Director of Community Relations works with the group to prevent further occurrences.
- Act quickly on unpermitted Park gatherings to preempt trash problems.

Working with Event Organizers

- Obligate event organizers to carry out the trash and recycling plan set forth in their permit and agreement with the Parks Department.
- Require continuous bagging and disposing of trash and recycling, beginning with load-in, continuing during set-up, and extending throughout an event.
- Complete and sign off on post-event trash removal in sections, rather than over the entire event space. This allows organizers to finish cleanup without being responsible for new trash from regular Park visitors.

Conservancy and Public Events

- Divide permitted area into sections and dedicate specific staff to trash removal in each one.
- Provide additional staff as needed.

Effective Practices

- Use supplementary receptacles if needed during the event and remove after the event ends.
- Line receptacles with multiple backup trash bags so collection can proceed without interruption.
- Provide small Conservancy-branded trash bags to encourage visitors to bag and remove their trash.
- Remind audience members to take trash with them when they leave.





A Day of Trash Management in Central Park

The Conservancy organizes trash management into specific zones within the Park as a part of its broader landscape maintenance system. There are 49 horticultural zones, each with a Zone Gardener responsible for trash removal as well as gardening and other groundskeeping. Many zones also have Groundskeepers or Grounds Technicians who assist the Gardener and handle trash removal on the weekends. Zones are grouped into nine larger managerial units called “sections,” each overseen by a Section Supervisor. Night Operations also organizes its work geographically, by area; its 19 areas are larger than horticulture zones. By holding staff accountable for keeping their zones trash free, the Zone Management System promotes accountability, familiarity, and pride in accomplishment. Cleaning up the landscape gives staff an immediate sense of gratification and showcases their horticultural efforts. Although each zone has its own character – and every day brings different challenges – tracking a few Conservancy staff as they manage trash throughout the day gives a sense of how it all comes together.



DAYTIME OPERATIONS | The Mall and the Naumburg Bandshell

🕒 7:00 am



The Zone Gardener checks in with his Supervisor, then heads to his zone in a utility cart, greeting dog walkers and commuters along the way. He parks the cart near the Bandshell stairs and takes out a grabber and a trash bag to pick up trash.

During the morning routine, he empties trash and recycling receptacles, picks up litter, answers visitor questions, sets up irrigation on the lawns, waters the seasonal plantings in ornamental urns, and mends fences.

Post cleanup, he will take care of horticulture tasks while continuing trash removal, scouring for smaller bits of paper, cigarette butts, and trash hidden in plantings.

🕒 12:00 pm



As noon approaches, the Park really comes alive. Groups of tourists, office workers, and couples stream in. They buy ice cream from vendors and unwrap sandwiches on the benches. The receptacles fill.

During the afternoon, he removes trash bags and brings them to the nearest drop spot on the East Drive, where they are collected by garbage trucks circling the Park. He stops to say hello to vendors who are setting up and other visitors strolling through the Mall; these relationships have helped nip some potential trash problems in the bud, he notes.

🕒 3:00 pm



Ending the shift, he checks a final time to make sure that receptacles are empty. That way, Night Operations doesn't have to play catchup during the Park's busiest hours.

Park Perimeter Trash Removal

🕒 7:00 am

First thing in the morning, a truck goes along the Park perimeter and empties receptacles that filled overnight. While staff conveys trash bags to drop spots, drivers make the rounds, working in staggered shifts.

🕒 3:00 pm

The bags accumulate faster. The second Night Operations driver begins his orbit of the Park. His routine also includes emptying receptacles along the Park perimeter, including Grand Army Plaza, Columbus Circle, and several other locations.

Working with Weather



Trash management changes dramatically with the seasons. In the winter, receptacles generally fill up once a day, and fewer visitors means less trash on the ground as well. In the summer, however, it's a nonstop juggling act.

On a pleasant Saturday in the summer, there might be 220,000 visitors in the Park, continuous baseball and softball games, and dozens of gatherings and events. It's astonishing to see how quickly trash accumulates. During days like this, trash receptacles at the busiest sites, might be emptied seven times a day.



NIGHT OPERATIONS | East 72nd Street to East 79th Street

🕒 1:30 pm



The Night Operations staff works out of the 79th Street Maintenance Yard, the Conservancy's headquarters for Operations and Horticulture. The shift starts with a five-minute meeting to brief the crew on what's happening in the Park that day.

The first thing the Grounds Technician does in the area is scout all the receptacles and note which places are busiest. She changes the bag, cleans up trash on the ground, and sweeps around the receptacles. She quickly gets into a rhythm: Stops at a row of receptacles, gets out, and peers into the openings. If a receptacle is full, she opens the top, pulls out the bag, ties it, and tosses it into the cart. She secures a new bag, closes the top, and moves on to the next site. She repeats this throughout her area.

Throughout the afternoon into the evening, she stays attuned to the location of the garbage trucks by listening to the radio transmissions and times her drop-offs to the drop spots accordingly.

As it gets dark, she closes up Ruth and Arthur Smadbeck Heckscher East Playground and nearby lawns, returning several times to check that nobody is inside. She makes sure all receptacles are emptied and bags brought to the drop spots so trash can be removed by garbage trucks before the next day.

“You find garbage in spots you can't even think of. If you don't check, it becomes a rodent issue.”



“From 7:00 pm to 9:00 pm is a transition time to make sure we have every can emptied, that everything is nice and neat. The goal is to leave the Park perfect when we go home at night.”

🕒 10:00 pm



The Night Supervisor checks to make sure the Park is clean and secure.

Continuing as late as midnight or 1:00 am on a busy day, one to three garbage trucks circle the Park drives collecting bags from drop spots. Drivers take turns going to a Sanitation Department transfer station so that one truck is always picking up trash.

The driver makes a final trip to the Sanitation Department transfer station before it closes for the evening. When he returns to the Park, the driver does a final tour, checking all the drop spots, collecting any remaining trash bags, so no bags remain in the drop spots overnight.

🕒 12:00 am

The Park is ready for the following day, when the whole process begins anew.

During a busy evening, the driver might make five to six stops and collect 14 tons of trash. Recycling is collected less frequently, once or twice a day. He makes note of areas where there is a lot of activity, so he can prevent unsightly piles of bags from accumulating.

Credits

All photographs by Central Park Conservancy except for the following:

- Courtesy of the New York City Parks Photo Archive: inside back cover (top left), p. 15 (top)
- Courtesy of Landor Associates: p. 24

Writing:

Anne Schwartz, Chris Cousino

Editing:

Anne Schwartz, Chris Cousino, Maura Lout, Susan Simon



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Managing trash in an urban park can be the most challenging task that we do and is arguably the most important. The *Central Park Conservancy Institute for Urban Parks – Trash Management and Recycling Handbook* is the result of a 30-year study of the evolution of trash management in Central Park. Not only are these best practices incredibly effective, they are also a cost efficient way of improving your park.

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Douglas Blonsky
President & CEO of Central Park Conservancy
and Central Park Administrator