



Parks & Recreation Commission

**Central Park
Integrated Goose
Management Plan**

November 17, 2020



Presentation Outline

- Central Park Lake
- Work Plans and Improvement Projects 2014-2020
- Canada Goose and Mallard Overpopulation
- Impact of Goose Dropping on Lake and Pathways
- Daniel Edelstein, Avian Biologist
- Proposed Integrated Goose Management Plan (IGMP)



Central Park Lake

Iconic Feature of Central Park

- 1 Million gallons reclaimed water
- Aesthetic focal point in park
- Community Wide Special Event Location
 - Art & Wine Festival, July 4th, SVBBQ, etc.
- Place for family & community recreation





Work Plans and Improvements 2014-2020

- Prior to 2014
 - Annual Lake cleanup
 - Limited short-term water quality improvement
- 2014 Biofiltration CIP Project
 - Improved lake water quality
 - Improved the aesthetics of the lake area
- Lake Cleanup every five years
- Bi-annual treatment to reduce algae blooms



Central Park Pond Bio-filtration



Using Wetland Plants to Clean the Pond

How is the pond water cleaned? Pond water is cleaned when water flows from the surface skimmers in the lower pond into bio-filtration cells filled with rounded stones. Microorganisms form a biotic zone around each stone, and serve to process the pond water that flows around them.

The pond water entering the cells typically has a high level of suspended solids and nutrients primarily generated by resident mallards and Canada geese. In addition, the remaining nutrients are absorbed by the wetland plants that cover the surface of the entire wetland.

After the pond water passes through the cells and the roots of the wetland plants, it flows to the upper pond and then down the waterfall to the lower pond thereby completing the cycle.



Canna x generalis 'Pretoria'
Bengal Tiger Canna



Thalia dealbata
Alligator Flag



Bacopa monnieri
Water Hyssop



Sagittaria latifolia
Broadleaf Arrowhead



City of Santa Clara Water & Sewer Utilities and Parks & Recreation Department



Impact of Goose Dropping on Lake and Pathways





Canada Goose & Mallard Overpopulation

Negative Impact on Central Park & Lake

- Reduced habitat for native species
- Decreased water quality of lake
- Increased “Dirty Pathways”
- Potential disease transmission to other species
- Reduced recreational enjoyment





How to Address the Issue?

- Agreement with an Avian Biologist
- Develop an Integrated Goose Management Plan (IGMP)
- Present IGMP to the Parks & Recreation Commission
- Present IGMP to Council for Approval
- Implement IGMP's Management Action Steps
 - Short-Term
 - Long-Term



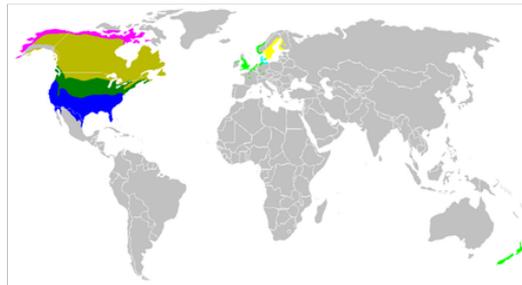
Daniel Edelstein, Avian Biologist

- **Certified Wildlife Biologist**
 - 25+ years field survey experience
 - 16 Years of Regulatory/Permitting Knowledge
- **Community College Birding/Wildlife Instructor**
- **Birding Guide since 1986**
- **Authored over 100 regulatory compliance documents**



Moffitt's Canada Goose (*Branta canadensis moffitti*)





Moffitt's Canada Goose

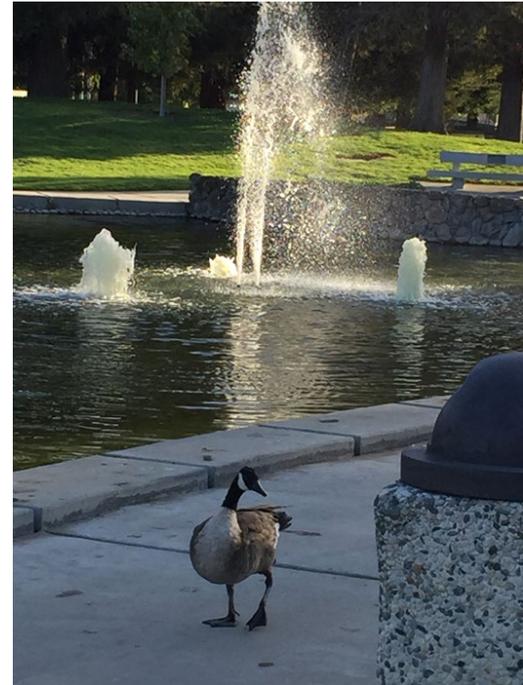
(Branta canadensis moffitti)

Large body 30-43", big bill, often in large groups; this species nests in late winter &/or spring, with baby geese typically hatching at the lake from May – June annually.

Nesters joined by nearby geese geese families join together as large groups after the breeding season, thereby causing an overpopulation at the lake and surrounding lawn areas in the park and nearby.









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Problems Associated with the Growing Number of Geese

- “Dirty” pathways
- Increased maintenance time and cost with same daily result
- Park patrons deserve a clean and “less-odiferous” outdoor experience
- Poor water quality in the Lake (each adult goose drops ~1/2 lb feces per day)
- Decreased habitat quality for other wildlife species that compete at the lake for
 - Roosting sites
 - Foraging resources
 - Nesting areas
- Potential avian disease spread to other bird species
- Reduced biological diversity as the large, naturally-aggressive geese out-compete dozens of other bird species for food and nesting areas
 - geese always prevail



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CENTRAL PARK CANADA GOOSE & MALLARD SURVEYS (2020)

Date Of Survey	Number of Canada Goose Counted	Newborn Goose Seen?	Number of Mallard Observed
7/7/20	88	No	59
8/13/20	95	No	71
9/30/20	80	No	64
10/22/20	158	No	87



Integrated Goose Management Plan

SHORT-TERM SOLUTION STRATEGIES:

The following management goals and actions in the IGM are short and long-term strategies to gradually reduce the overpopulation of geese at Central Park Lake and its surrounding areas.

GOAL #1: Educate The Public About The Need To Reduce Geese Overpopulation

• ACTIONS TO SATISFY GOAL:

- Advise visitors to stop feeding geese (and Mallard ducks) at the lake**
- Add friendly, educational information signs at the park benches where people often feed the geese (and Mallard ducks)**
- Add information signage at access trail places where visitors enter the park**



Informational Signs





SHORT-TERM SOLUTION STRATEGIES:

GOAL #2: Prevent geese from walking into the lake.

- **ACTION TO SATISFY GOAL:**
 - **Add fencing to the lake's entire perimeter**
 - **Result: Geese will not have walk in access to lake**

Functional Fencing





Usage of Functional Fencing





Integrated Goose Management Plan Implementation

SHORT-TERM SOLUTION STRATEGIES:

GOAL #3: Reduce Success Of Geese Breeding At The Lake:

- **ACTION TO SATISFY GOAL:**
- **Begin the Following Non-lethal Management Action:**
 - **Addling Geese Eggs Prevents Hatching,**
 - **No Newborn Geese Occur at the Lake**



Addling of Geese Eggs







Integrated Goose Management Plan Implementation

SHORT-TERM SOLUTION STRATEGIES:

GOAL #4: Educate the public about the need to reduce geese overpopulation

- **ACTION TO SATISFY GOAL:**
 - Inform Santa Clara residents, park visitors, wider community about the need to reduce the goose overpopulation problem
 - Ensure public has a “voice” and is informed
 - Allowing public input/comments via:
 - Educational public meeting (remote “Zoom” or in person)
 - City’s website
 - News release about the goose overpopulation problem



Public Community Outreach



- Parks & Recreation Commission
- Virtual Meeting(s)
- Community Site Visit(s)
- City Council Meeting







Integrated Goose Management Plan Implementation

SHORT-TERM SOLUTION STRATEGIES:

GOAL #4 (continued): Educate the public about the need to reduce geese overpopulation

- **ACTION TO SATISFY GOAL:**
- Inform Santa Clara community members about the need to reduce the goose overpopulation problem via:
 - articles for public to read local print/online media
 - Request Resolution from Santa Clara Audubon Society
 - Continue to ensure public has a “voice” and is informed
 - Public scoping/educational meetings (via Zoom or in person)
 - Add public notice on the City’s website, so comments may be submitted



Integrated Goose Management Plan Implementation

LONG-TERM SOLUTION STRATEGIES

GOAL 1: Reduce the nesting success and presence of geese at the lake

- **ACTIONS TO SATISFY GOAL:**
- **Implement one or more of the management strategies highlighted in the IGM:**
 - **Continue ongoing, annual goose addling to prevent egg hatching = few to no newborn geese born at lake area**



Integrated Goose Management Plan Implementation

LONG-TERM SOLUTION STRATEGIES (cont'd)

GOAL 2: Reduce the nesting success and presence of geese at the lake

- **ACTIONS TO SATISFY GOAL:**
- **Modify the lake's habitat to reduce goose immigration presence AND to encourage geese to leave the lake area via:**
 - **Implement habitat modifications, such as:**
 - A) **Fencing addition around the Lake**
 - B) **Vegetation Plantings:**
 - 1) **Around the lake**
 - 2) **On the Island (to reduce nesting success)**



Community & Commission Input

- **Commission Questions**
- **Community Input**
- **Commission Discussion**
- **Commission Recommendation**



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