

A “Refresh” Program for Swan Lake Park

by Fred Peters

Good news! Markham Council and city staff have initiated a program to address the comprehensive needs of both Swan Lake and Swan Lake Park.

You may have noticed a number of changes in the park over the summer including the planting of 32 new trees near the windmill and the installation of “toxic algae” warnings around the lake. We hope to get the fountain back once the water quality has improved.

Plans call for a dedicated pathway along the Amica shoreline which will provide for a safe passageway around the lake. Damaged areas near the roundabout are in need of repair and we have asked the staff to look for ways to improve the safety and accessibility at the roundabout in concert with the expected repair work.



A “Refresh” for Swan Lake Park

On June 23, 2020, Markham Council asked staff to report on a long term water quality program for Swan Lake. Following the meeting, city staff initiated detailed discussions and planning for a “Refresh” program to address key issues in Swan Lake and Swan Lake Park.

Markham has engaged the Toronto and Region Conservation Authority (TRCA) to assist in a review that will address issues concerning invasive species in the park and possibly shoreline redesign that, while limiting Canada geese access, will reopen overgrown viewing areas.

The enhancement efforts are expected to take several years to complete.

Water Quality Improvement Program

The core challenge to restoring Swan Lake and Swan Lake Park is to improve and stabilize water

quality. The dark green water and algae blooms on the surface are due to an excessive amount of phosphorus in the water. As part of a planned \$200,000 program, sediments at the bottom of the lake will be tested in the fall of 2020 to help calculate the amount of the Phoslock required to eliminate the current phosphorus in the lake by an application in early spring 2021.

Friends of Swan Lake Park is encouraging staff to find ways to improve oxygen levels in the lake in support of both a robust aquatic life and a balanced fish management program.

In February 2021, Council is expected to approve a long-term phosphorus management plan. Decisions on oxygen levels and fish management will likely require more time.

Reducing Phosphorus Contribution by Canada Geese

Most of the excess phosphorus entering Swan Lake is attributed to Canada geese with only 30% to 50% the result of runoff from adjacent areas and stormwater. Staff has concluded that there is little that can be done to reduce stormwater and park runoff, so the focus is on what, if anything, can be done to reduce the contribution by Canada geese.



For the past five years Markham has engaged a service for scaring away geese (called “hazing”) in the spring, summer and fall, plus a springtime egg oiling program. Following consultation with a goose management expert at the TRCA in August, Markham staff proposed an enhanced program, including a plan to relocate geese from Swan Lake Park.

Spring and Early Summer Program

In early spring flocks of migrating geese stop at Swan Lake on their way to their northern nesting areas. They tend to stay for only short rest periods before heading north so the numbers and the impact are not as great. Some of the techniques planned for the fall program could be applied in the spring as well but are not seen as cost effective.

Geese that come to spend their summers at Swan Lake account for 25% of the phosphorus problem and have the largest impact on the community’s ability to enjoy the park.

The program to oil the eggs will continue and an effort will be made to round up and relocate any adult birds that come here to molt. This can only be done during the period when they are flightless—usually in June. Unfortunately, it is not safe to transport the young goslings, therefore those that successfully nest will not be relocated.

The TRCA has had success relocating geese from other local municipalities to sanctuaries in Southern Ontario and recommends the \$10,000 annual program for Swan Lake Park.



Canada Geese in Swan Lake, November 2017
Photo courtesy of Don Fowler

Fall Migration Program

In late October and through November large flocks stop over at Swan Lake on their route south. They are returning with their young, so they come in greater numbers. If the weather is good and food is plentiful, they will stay for extended periods. Daily counts of over 1,000 are common. Almost 70% of the geese phosphorus problem is related to the fall migration. It is also the most challenging one to address.

A harassment program has been used for a while, and the intensity will be increased under a more frequent schedule. The primary drawback—these approaches are very labour intensive. They work as long as there is someone on the shoreline. Once they leave, many of the geese return. Concerned that the proposed daily hazing program may not be effective, Friends of Swan Lake Park proposed a two-year trial of “Perpetual Harassment” by adding floating strobe lights on the water to reinforce the hazing efforts. The strobe lights, which cost \$5,000, are active all night providing a constant disruption.

Trial Approved for Fall of 2020

On August 14, the Markham Subcommittee of Council agreed to recommend to Council, for approval in September, the proposed Perpetual Hazing trial program for 2020 which will have a one-time cost of approximately \$15,000, plus approval for increasing the annual goose management program from \$14,000 to \$21,000 primarily due to the addition the annual relocation program.

Friends of Swan Lake has agreed to support the fall hazing program and to make a more concerted effort to tally the visiting geese.

As we know, Swan Lake is an attractive place. The goal is to reduce the impact of migrating geese by 25%. There is no obvious way to totally stop geese from coming to enjoy our lake.

Volunteers Needed!

We are looking for volunteers to support the geese counting effort this fall. If you are interested in helping, please email:

friends@friendsofswanlakepark.ca.

There is more information on goose management on our website at www.friendsofswanlakepark.ca.