

Lake Lily Serves Many Purposes

Walking around Lake Lily, you may wonder about the current state of the lake— algae floating in the water, low water levels, and vegetation growing up out of the water. The Environmental Commission would like you to read the following information carefully so that you may be better informed about the lake. Please keep in mind the two primary purposes the lake serves in our community: 1) A wildlife habitat and 2) A stormwater basin. The Borough actively manages the lake in order to keep both of these important functions in balance.

The only water in the lake comes from rainfall, storm drains and groundwater. Lake Lily is not spring fed, so it is highly sensitive to water runoff and drought conditions. It is actually a shallow pond, no deeper than five feet at its deepest point. Periods of drought drop the water level so low that algae and vegetation growth is accelerated. Because the water level reflects the level of ground water in the town it has to be pumped down to keep ground water out of our water meter pits. The lake is also pumped down in anticipation of a severe rain storm to prevent flooding as it serves as our only stormwater basin.

Ponds and lakes in developed areas are prone to filling in with sediment, organic matter, and excessive nutrients due to water runoff from construction, lawns and roads. This leads to overgrowth of aquatic vegetation, water quality degradation, and extensive algae mats. The year-round presence of Mute Swans and Canada Geese adds excessive harmful nutrients.

All lakes go through a natural aging process called eutrophication, which changes the lake when chemical nutrients like phosphorus and nitrogen enter the water. “Cultural” eutrophication occurs when human activity speeds up this aging process by allowing sewage and fertilizers to enter the ecosystem. The excess nutrients can cause algal blooms, vegetation growth, poor water quality and foul odors, while also being detrimental to aquatic life. In order to mitigate eutrophication of the lake, the Borough arranges for a private company to treat the lake FOUR times per year. This is an increase from the past when three treatments were applied annually. The company also monitors the water quality and maintains the bubblers in the lake.

The lake has also been treated with a product designed to speed up the decomposition of muck, which provides a growing medium for aquatic vegetation. This muck-reducing product works best in cold water, so additional treatments will be made this winter. The Friends of Lake Lily contributes financially to partially defray the costs of the treatments and bubbler maintenance. The wetland vegetation at the south-end and around the edge of the lake, which some find unattractive, is largely native and benefits wildlife. The only known invasive weeds are Parrot Feather and Phragmites, both of which are very difficult and costly to eradicate. The other wetland vegetation provides nectar for pollinators, including Monarch Butterflies.

Some helpful practices that residents could embrace are:

- * Forego the use of lawn fertilization. Lawns that are fertilized contribute to the acceleration of eutrophication in the lake.
- * Pick up after your pet. Pet waste left behind is ultimately washed into the lake and contributes to poor water quality.

* Curtail your use of pesticides. Any chemical applied to plants will eventually impact the quality of the water that makes its way into Lake Lily.

More in-depth information on this topic is available at:

<https://www.jerseyyards.org/threats-to-bays-rivers/fertilizers-in-our-waterways/>

The Cape May Point Environmental Commission