

The Friends Of Lake Blue Heron

“Protecting the Quality of Life and the Ecology of Lake Blue Heron”

This community has always placed a high value on the natural beauty and environmental health of the neighborhood. It’s why many of us moved here.

Perhaps one of the most prominent elements of this environment are the lakes. After all, we live in Killlearn “Lakes” Plantation and you are reading the “Lakes” View magazine. The lakes form a foundation within our environment for all our natural beauty and our property values.

In the summer of 2018, a small group of homeowners joined together to help add time, energy, and dollars for the benefit of increasing the health and beauty of Lake Blue Heron. The Friends of Lake Blue Heron committee was formed. For the past eight months, the group, along with the Killlearn Lakes Homeowners Board and the Golden Eagle Homeowners Board have worked to gather knowledge and ideas that will benefit our community as it relates to this 50-acre body of water. This article serves to introduce the group’s work to date as well as to invite you to stay in touch. Visit <https://FriendsOfLakeBlueHeron.org> for continuous updates and the opportunity to join in.



Lake Blue Heron History

The lake was not always a lake. In fact, it would have been tough to use the term “lakes” at all in our area. From the Leon County “Then and Now” map (available online), here is a side-by-side view of how this area looked (1954 on the left, 2015 on the right).



The first “home-owners” on the lake are still our long-term neighbors, Ginny and Gene Dinsmore. They began constructing their home in 1980. It was a work of love and took 8 years to complete. This gave Keith Balon the opportunity to grab the first “resident” on the lake status! Keith moved in to his home in 1984 and is still resident in the same location.

In fact, the name of the lake is “technically” Upper Lake Dianne – you will see this on most County and Google maps. My assumption is that “Upper” refers to its northern positioning related to Lake Dianne (officially known as Lower Lake Dianne) as Lower Lake Dianne is really “up” stream from the Lake Blue



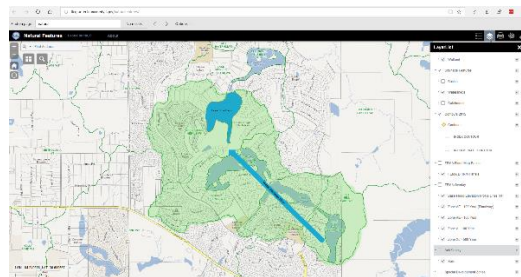
Heron. The name “Lake Blue Heron” was promoted by Ginny and Gene Dinsmore upon seeing such a large population of Blue Heron (and other bird species) on the lake. They preferred the more descriptive name and lobbied the Killlearn Lakes Homeowners Association to officially change its name within the community. We still enjoy the annual visitation of flocks of white and blue heron, along with frequent visitors of bald eagles, hawks, and many more. We even see a few white pelicans visit each year for a brief period.

The lake is officially a stormwater retention basin. Here is a description from Stormwater Maintenance, LLC:

“The main difference between a detention and a retention basin is whether or not it has a permanent pool of water – like a traditional “pond”. The water level is established by the low flow orifice. Most of the time the orifice is part of a metal or concrete structure called a riser. Retention basins have a riser with an orifice at a higher point so that it retains a permanent pool of water.

A retention basin can also provide water quality benefits by reducing sediments and attached pollutants.”

Other attributes of a retention basin include generally shallow waters and high levels of inflow from surrounding land. Lake Blue Heron clearly matches this description with an average depth of 3.7 feet and a drainage basin water source that includes everything you see shaded in green here...



It is these two attributes that create the greatest challenge for Lake Blue Heron.

Why Be Concerned?

For just a moment, envision living in this community without the lakes. 4,000+ homes in a relatively tight geographical space – larger than most cities in Florida (we would rank 282 out of 891 if we were an official city in Florida). What would your property’s value be if the lakes were removed?

According to Zillow.com, lake-front homes would see a 20-30% decline in value if the lakes were removed from the community. It’s more difficult to estimate what a home’s value includes for being in a

“Lake community” versus a 400-acre tract of land with no lakes. Even if you consider a conservative estimate of 5% value to be in a lake community, then a \$250,000 home in Killlearn Lakes Plantation benefits in value by \$12,500, nearly enough to pay the realtor’s commission.

Allowing even one lake in a “Lake community” to decline in visual quality will ultimately negatively impact every home’s value in Killlearn Lakes Plantation as potential buyers are likely to see the 1 lake’s condition as a “trend” as opposed to an anomaly. The cost to preserve every lake’s visual quality is far less than the potential residential value loss. In fact, most likely the value lost in 1 home’s sale would cover the cost of treatment for a single year on the lake needing the most effort.

Why Is There A Problem?

Lake “quality” can be measured in many ways. Here we will focus on two items:

- The water’s quality such that native wildlife and healthy native vegetation can thrive
- The lake’s visual aesthetics such that residents can access and enjoy the beauty of a lake environment – which improves all property value in Killlearn Lakes Plantation.

By far, the largest “negative” impact on the lake’s “quality” is the presence and growth of filamentous algae. For more information on this form of algae, please visit <https://FriendsOfLakeBlueHeron.org>. In brief, this is a highly invasive form of algae and is considered one of the most intrusive forms of algae in Florida waters. It is very difficult to reduce the presence of this algae without chemical treatments. The best long-term treatment is to improve the factors that would limit the formation in the first place.

These factors include

- Reducing the level of “nutrients” that enter the lake
- Promoting healthy plant vegetation in the immediate vicinity of the lake’s shoreline
- Reducing the solar-warming within the shallowest regions of the lake

A Noble Attempt

In 2005-2008, there was an attempt to help Lake Blue Heron. The infrastructure of the dam needed some maintenance and it was felt it might be a good opportunity to improve the lake. A large grant was secured, and it was used to drain the lake (twice) for the main purpose of “deepening” the lake. A significant amount of bottom material was removed resulting in a small increase in lake depth. However, the refilling of the lake suffered due to two summer drought seasons. The “lake” became an extremely healthy environment for marsh grass and plants to grow.

Unfortunately, while intentions were well-meaning, this project did a few things to hurt the lake that we are still having to mitigate with higher frequency of chemical treatments.



A significant bio-mass of vegetation was allowed to infiltrate the lake. This occurred twice during the project as the refilling lasted two growing seasons. Additionally, hundreds of tall trees (mostly in poor condition) and native wax myrtle trees were removed around the shoreline. Attempts to replenish this vegetation failed as a result of beaver activity.

Nutrients come in many forms. By far, the largest source of “bad” nutrients comes in the form of rain-water runoff delivered by the entire watershed basin as previously pictured above. This not only includes fertilizer used by lakeshore homeowners, but also includes fertilizer used by nearly 3,000 homes in the community. When fertilizer nutrients leave your yard, they enter the rain-water drainage system, which very quickly is routed to the lake environment shown – leading to heavy intrusion of nutrients into shallow Lake Blue Heron. The lack of shore vegetation and extensive “shallow” regions of the lake create a fertile growing medium for the filamentous algae.

For example, the Golden Eagle Golf Course borders 47% of Lake Blue Heron’s shoreline. One of the Golf Course’s primary benefits to the community is an attractive recreational resource that also positively raises home values in the community. To this end, the golf course must seek to operate a profitable, yet high-quality golfing environment. Golfers enjoy well-manicured fairways and greens – each requiring regular chemical (fertilizer) treatments. A single treatment of fertilizer for the course runs into the tens of thousands of dollars. Fortunately, the golf course has a “profit” motive. The profit motive results in the management choosing very carefully when they plan to fertilize. They want to ensure the fertilizer feeds the grass – not the lake algae. So, they plan to fertilize only when rains are not likely and when it is most likely that the fertilizer will be quickly absorbed by the grass.

Homeowners do not have this same set of motives. The homeowner seeks a pleasant looking yard. If it’s “fertilizing season” then most simply buy bags of fertilizer and apply it until it’s all gone. “More” is often better as it means a greener yard. One of our goals is to develop some handy tools that homeowners can use to better allocate when and how much fertilizer to apply – with the goal of significantly reducing the amount of nutrients that enter the storm-water runoff system. There are techniques that can be used to extract nutrients from runoff before it enters the lake. However, these techniques require significant annual expense. It would be much more beneficial to limit application of excess nutrients throughout our community.

At present, with the level of nutrients and without enough lake treatments, the lake is inundated with filamentous algae each summer. The peak intrusions occur in the middle summer months, the very same months that many residents in Killlearn Lakes Plantation seek to enjoy what the lakes offer – fishing, boating, and wildlife viewing. In late July and August of 2017 and 2018, when budgets were tight and treatments were reduced, we saw between 30-50% of the lake’s surface obstructed with floating algae islands. This impacts recreational use as boats cannot navigate the heavy pads of algae and it also impacts fish and bird feeding and bedding opportunities.



What Has Been Done Recently?

In the summer of 2018, when the Friends Of Lake Blue Heron (FOLBH) group formed, we began by canvassing the shore residents for help. After all, the greatest impact of lake quality does immediately impact the residents that surround the lake. They responded immediately and helped raise funds by offering to pre-pay their 2019 homeowner dues as well as donate additional funds to increase lake

treatments. Additionally, the group approached Golden Eagle Homeowners Association and was pleased to receive its continued support to help in the lake's treatment. The extra treatments were conducted in late summer and late fall – a bit late to impact the 2018 summer experience, but hopefully in time to help minimize the effort that will be needed in 2019.

The FOLBH also committed to continue working with both associations in helping to manage the lake environment. We've established Friends Of Lake Blue Heron website as a tool to ensure anyone who is interested in the lake can transparently and easily keep up with all our activities. If you sign up with the website, you will proactively receive notices via email. Or you can just visit regularly as all information is publicly available as well.

What Can WE Do?

Our long-term goal is to reduce the amount of chemical treatment required to maintain a “visually” appealing community resource, that of Lake Blue Heron. We would benefit in several ways. First, our annual budget for lake maintenance would be reduced. Second, the balance of maintaining and improving wildlife health and recreational enjoyment would be easier to achieve. And finally, the water quality of lakes downstream (Lake Monkey Business, and Lake Iamonia) would be significantly improved.



If you are a homeowner in Killearn Lakes Plantation, including Golden Eagle, then you can immediately help by reviewing your yard fertilization plans for 2019. We will publish some guidelines for you on the FOLBH website by March 15, 2019. We cannot stress how important this one thing can be – it might reduce your lawn-care costs in many cases – it's most likely that it will not increase them any. If you are a homeowner around any of the lakes in our community, you can improve water quality by planting “lake-friendly” vegetation near the shoreline. We will also publish some guidelines

regarding these type plants for you by June 1, 2019. We also envision creating some “planning projects” where the FOLBH will sponsor test plantings. If you are a tree person, consider planting trees near the shoreline as they do two important things – they absorb nutrients before they enter the lake and importantly provide shade during part of the day that will help keep water temperatures lower.

If you don't live on one of the lakes, visit! The Killearn Lakes Plantation lakes, including Lake Blue Heron each have secured gate access. Visit the HOA office to obtain a key. Finally, join us! Register for the website. Stay informed. We value your input and ideas. We've conducted many web site searches and even today, as I was preparing to write this article, I located a site that promoted a very interesting method for “catching debris” before it can enter the lake. On the website we have also provided links to terrific lake water management sources.

