FLG Members Enjoying Activities Together 2012

Friends of Lake Glenville

Protect & Preserve Lake Glenville

Spring 2012 Newsletter www.friendsoflakeglenville.com Carolyn Franz, Editor

Glenville Lake History

Chad and Midge Drake's Stories

In 1951, my parents, T.J. and Mima Drake traded 272 acres in Hobe Sound, Florida for 9 acres in Glenville, North Carolina, In addition, the Drakes received a cash payment of $15,000. For the Drakes it was a sight unseen trade. Four acres of the property was on the east side of Highway 107. This parcel included a rock quarry which provided crushed rock for Highway 107 when it was first paved. Prisoners operated the mine. This parcel also included a 1½ story farm house constructed in about 1840. Most old time Glenville residents think the house was moved out of the lake bed when Lake Thorpe was created in the early 1940's. Some think the house was moved in the 1930's to a site near its present location but that it was necessary to move it a short distance when Highway 107 was constructed. At any rate, the house is presently located at 3472 Highway 107 North.

My parents first saw the property in 1953. It was in total disrepair but they loved it. There was an improved spring but there was no storage tank. There was a kitchen sink with a drain system, but water was brought in from the spring by bucket. There was an adequate outhouse located about 30 feet behind the house. Access to the loft area was a portable ladder stuck through a hole in the first floor ceiling. The loft area had a floor but was

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Water Quality

A New Look at Old Data

Doug Odell

Our Water Quality program is one of our organizations key and most important functions that support the "Preservation and Protection of Lake Glenville". As one of our Board of Directors, it has been my responsibility to oversee and direct this program. The program currently has two major parts; stream or in-flow water testing and lake water testing. Lake water testing now has two major efforts. These programs are funded by our dues and donors. And these programs are always effective only through our generous volunteers.

Ken Kitchens is overseeing our stream testing program. During the winter months Peter Wallingford has been collecting the periodic water samples from the six primary inflows and transporting them to the Ashville lab where the chemical analysis of the water is done. We always can use some summer volunteers. The list of previous volunteers reads like our membership list and all of those efforts are very much appreciated.

We are very fortunate to have a retired Oceanographic Researcher doing our lake sampling. Dr. Donald Hansen has been taking significant amounts of data for a number of years. Secchi Disc readings measure the vertical clarity of the water. And, turbidity samples measure the amount of particulate matter in the water. Now, with

Doug Odell attends NCLMS Algea Conference

The President's Message: Spring 2012

Howard M. Austin

As I write this, I am hoping that Spring, once and for all, is just around the corner. After a mostly non-winter and an early warm spell that woke up all the plants and shrubs, a cold snap last week has hit our Japanese maples and to a lesser degree our hostas. Hopefully both will bounce back. The lake is nearly "full" as this is written, only about a few inches below what most of us think of as "full pool" (98 on Duke's scale, with 100 being up in the woods). Somewhat curiously, there are very few boats out of storage and at docks yet.

New Board member Dottie Ennis has assembled a new re-energized Social Committee that has in turn found two new venues for the Member Breakfasts, Tamburini's in May and Cornucopia in June, and is working hard on a great Summer Social. One of the most public components will again be FLG sponsorship of a Groovin' on the Green event, this time in early August. After last year's great attendance at the concert we sponsored, this will again be a chance to have a good time and promote better community awareness of our group. We hope to see many of you at as many of the events as you can fit into your schedules and hope you'll bring friends along as potential new members.

The signature water quality program continues, as outlined in articles in this issue of the newsletter. Doug Odell and Don Hansen have communicated back and forth over the winter and look forward to getting out on the lake. Given that this is our signature program and that its two most prominent supporters long ago qualified for Medicare means we truly need new helpers and more importantly some understudies to make sure this program continues at its current high level into the future. A scientific background might be helpful, but I suspect Doug and Don could teach an MBA or an English professor what they need to at least get started. In May Doug will be attending another in a series of workshops put on by state and national lake associations that could begin to make any of us into an expert.

Other programs besides water quality and social events are being considered, but suggestions from members are always welcome. flg@friendsoflakeglenville.com or a phone call to any Board Member are good ways to pass your ideas along.

As this goes to press, we still have a vacancy on the Board, with additional turnover expected this August at the end of our fiscal year. If you have time and an interest in some aspect of FLG activities and can be available relatively year round, the icy dead of winter probably excepted, please telephone or email me to learn about what the Board does and how you might fit in. We are a Working Board, with the chance to "Protect and Preserve Lake Glenville" being a great reward.

See you on the lake!
Howard

Howard M. Austin
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Pictures From The Lake
Old and New

Winter scene with snow covered dock and ice extending out into lake.

Ken Cowles is the son of Bob & Jackie Cowles and an accomplished water skier from Sarasota Florida.

Carpenter family and friends in 2006 and 2008, taken by Bernie Love.

This 25" 5 1/2 lb Walleye was caught on beautiful Lake Glenville 4/28/2012 approximately at 11:30 PM on a crankbait in 7 to 8 feet of water by Spoon-plugger Gary Wright.

Bear was observed from a pontoon boat swimming across Norton Creek and climbing up a seawall. (2011)

Facts About Lake Glenville

- **Dam completion: October 23, 1941**
- **Size: 4.5 miles long, 1470 acres, 26 miles of shoreline**
- **MSL: 3500 feet altitude at dam**
- **Maximum depth of lake at flood level: 125 feet**
- **Highest lake east of the Mississippi River**
- **Major supplying streams: Hurricane Creek, Norton Creek, Mill Creek, Cedar Creek, and Pine Creek.**

BOARD MEMBERS:

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FLG Communications & Plan for 2012

What's New for 2012

Carolyn Franz

As we start the 2012 season for Friends of Lake Glenville, it is important to look back on what our organization accomplished in 2011. The 2011 FLG Board met and discussed the input from Dr. Richard Bechener's Research Study on FLG, and considered members and potential members opinions.

That resulted in a new approach for 2011 based on four key areas of agreement:

-Main goal to increase communication and visibility at all levels.
-Provide members with current newsletter and early notice of meetings and events through a calendar and on website.
-Gain recognition and visibility of FLG within Cashiers and Glenville communities.
-Revitalize and increase our memberships.

We heard from lots of our members:

-You praised the newsletter and calendar .
-You turned out for our new FLG sponsored Grooving on the Green Event with Hurricane Creek. It had over 600 attendees and was a huge success.
-You continue to rave about our Summer Social for our members.
-You appreciate the excellent work being done on water quality reporting and concern for the long-term health of our Lake Glenville.
-You welcomed our new members to Friends of Lake Glenville.

We know you will all be talking about the work of our new social committee:

Dottie Ennis, Board member Advisor and Social Committee members; Laurie Williams, Una Newman, David Wallace, Ike Eichhorn and Mary Lou Wass.

They have quickly moved to set our Breakfast meetings in different venues and menus. Expect to hear more from them at our meetings as they finalize the Summer Social.

Friends of Lake Glenville owes a huge gratitude to our retiring social committee. Started by Debbie Rankin the group grew to co-chairs Lynn Leach and Karen Scarborough, plus lots of "Elves."

They were able to bring us a special event with fantastic food and drinks for many years and FLG as an organization is better for their hard work and support.

Von Grey Sisters to play at Groovin on the Green June 22nd

Here's another event for FLG members to add to their summer calendar. Our FLG members, David and Lynn Leech highly recommend this young sisters group. David Leech is a past FLG Board member and also ran the lake clean-up event for many years.

Lynn's comments on this unique musical group:

"They live in my Atlanta neighborhood and their parents have been friends of ours for more than ten years - waaay before the youngest daughter was even born! So we've literally seen these girls grow up and begin their early music careers. They have also been guests of ours at the lake for the past 13-14 years as well, and love our area."

The group is von Grey and they are 4 sisters, aged 11-16 and extremely talented. Each play 3-4 instruments, write their own music and play a unique blend of country/Americana/folk. The music features strong 2-3 part harmonies and they will be a great match for Cashiers outdoor concert series. The band has been gaining momentum in the southeast - in the past year, they've opened at Atlanta's Chastain Park for Sarah McLachlan and at Centennial Park for Crystal Bowersox. You can check out their web site: www.vonGrey.com for more info.

Von Grey's musical journey, starting with years of Classical instruction on multiple instruments, has moved through experimentation with bluegrass, Celtic and European folk, classic rock and country – finally culminating in a sound that is all von Grey. Their original music incorporates unique instrumentation, and the natural blend family-harmonies offer. This band of four sisters from Atlanta have spent the last several years performing their eclectic collection of music, but for the past several months have been focused on honing an original body of work that authentically reflects their style and values. With a busy recording schedule in early spring 2012, von Grey looks forward to the release of a new EP in summer 2012

Let's have a special Friends of Lake Glenville turnout for this group. Thank you to Lynn and David for getting FLG on board for this evening of music.

Lake History cont.

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otherwise unfinished except for straw on the floor. The kitchen had a wood burning stove and a small refrigerator. Electricity was limited to three ceiling fights and three or four outlets. The best one word description of the house would be "abandoned." The sky was the roof and "critters" were everywhere. Lewis and Gladys Monteth were the closest neighbors. Fortunately for my parents, Lewis was adequately skilled in the construction trades and over a period of several years he did what was necessary to make the cabin into a comfortable summer home. At some point in those early years Gladys and daughter Sybil painted the exterior of the cabin. I believe it was a light gray with bright apple green trim. The five acres on the west side of Highway 107 is adjacent to Lake Glenville. In 1956 lily Dad purchased three acres from William and Edith Fisher that joined the five acre parcel - total cost: $600. In 1962 my Dad employed Lyman Stewart, a land surveyor, to subdivide the eight acres. Mr. Stewart staked out twenty lots, of which seventeen had lake frontage. He drew up a plat and recorded it at the Jackson County courthouse - total cost: $60. Over a period of several years the lots were generally sold in the price range of $1,600 to $2,200. My folks held me and Midge up - we got the pick of the litter - our lot on the lake was $750. My three brothers also enjoyed discounted prices. When my Dad passed on in 1973, my Mother gifted the cabin and four acres to Midge and me. We added a two-car garage with an attached efficiency. And we've made a special effort to maintain the cabin and property that was gifted to us by my Mother. Our two daughters and their families use the cabin as their summer vacation home.

In 1991 Midge and I built a nice home on our $750 lake front lot. We love our home on the lake, however, I spend a lot of hours every week just "hangin' around" the cabin. Somebody has to water the flowers, feed the birds and pick the blueberries. Midge and I are thankful every day for that sight unseen trade back in 195 1. We think splitting our time between South Florida and Glenville, North Carolina is as good as it can get. I don't know that it fits into the Glenville history story, but . . . My Mother's father was a cowboy and lawman in the Perkins, Oklahoma area. My father's father was a real estate developer and banker in the same area. In the 1890's both of my grandfathers participated in the Cinamaron land rush and each staked out a 160 acre homestead property. Both families, in time, migrated to Lake Worth, Florida where my Mother and Dad married and where my brothers and I were born.

Chad Drake

"IT SHUR IS BIG FUR HOW LITTLE IT IS"

The above was the comment made by a 10 year old girl after I led her eagerly through our old cabin. Although worded differently it was the same general response given by most individuals after viewing the interior of the house. The house - with its hole in the roof - was acquired in 1951 as a vacation cabin by my husband's folks - Mima and T.J. Drake - having traded for it sight unseen for some land in Hobe Sound, Florida. It was built approximately 160 years ago and has been moved twice. The first time when Thorpe Reservoir (Lake Glenville) was created and later when the owner decided it was too close to Highway 107. The first move from the bottom of the lake we have not been able to verify, but its second move we know is true. Over the years many changes have been made but most of the original structure still remains. Running water brought a day of rejoicing. To this day I regret tearing down the old "out house." it was a good idea; however, today we would love to have it in the back yard as a conversation piece. The old screen porch that you walked through to the kitchen is now a closed in dining room and bathroom. The loft area which was apparently never used except for storage is now two good sized bedrooms and a bath with an old claw foot tub. The kitchen has been remodeled with a sliding glass door revealing a large deck. A second story door and "bridge" was built for safety purposes in case of a fire. We have enjoyed buying the primitive pieces of furniture and quilts. We have tried to maintain a balance between necessary comforts and retaining the sweet spirit of what it once was to so many families.

Midge Drake

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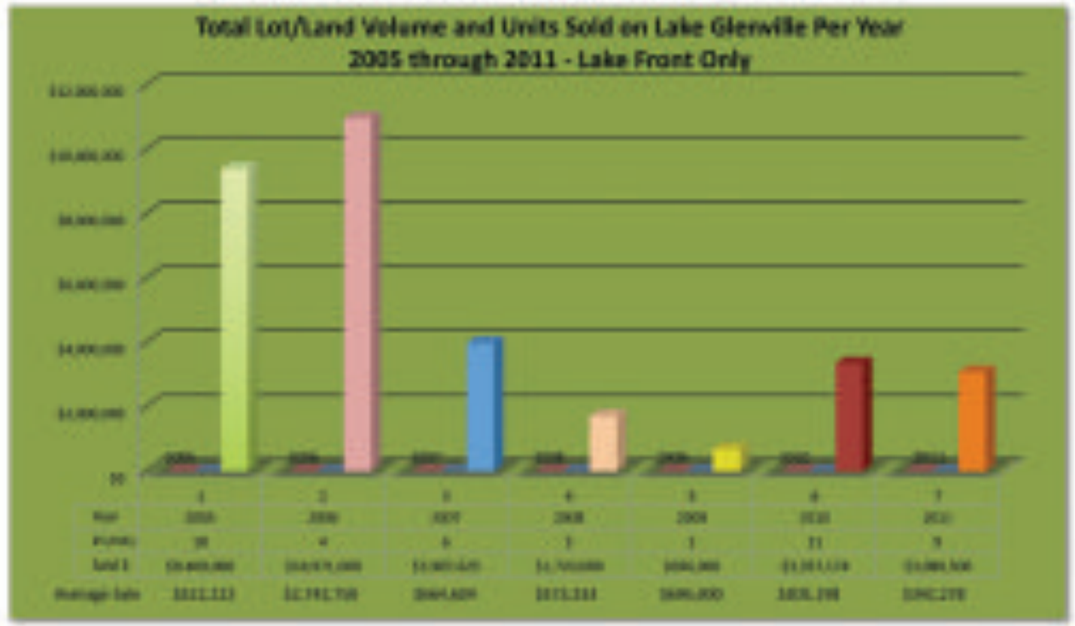

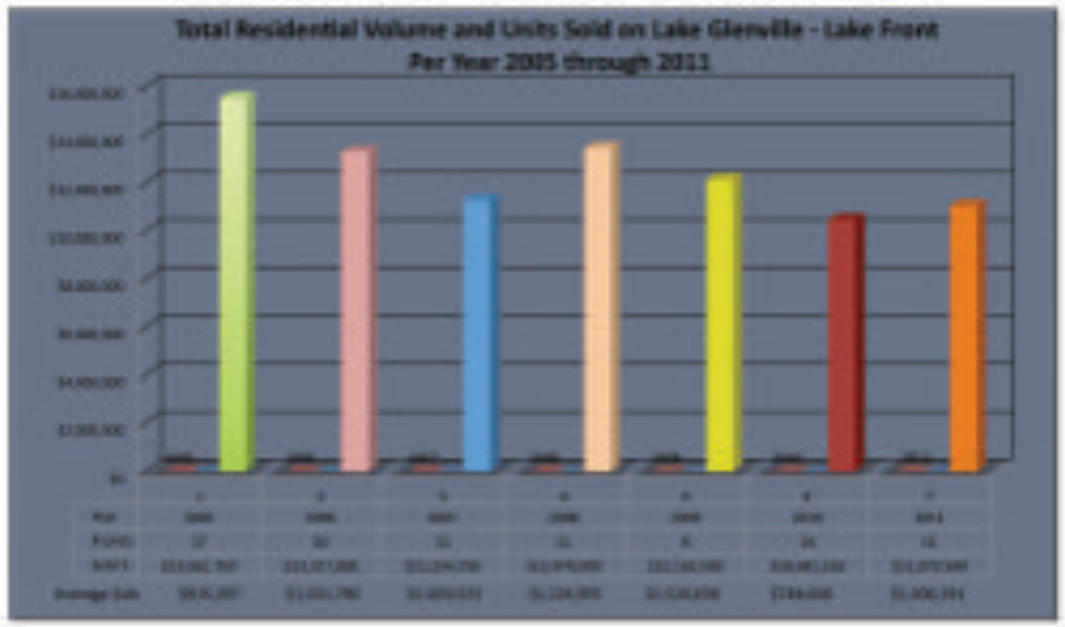

LANDMARK REALTY GROUP

CHART CREATED AND DATA EFFECTIVE 1/22/2012

"Boat Friendly"

Be aware of, and obey the North Carolina laws of boating.

- Personal watercraft (jet skis) should observe the rules like any other watercraft
- Slow to 5 mph if within 200 ft. of boats, swimmers, fisherman, or docks. When "in doubt", slow down!
- YOU are responsible for the wake that your boat is throwing and should consider the consequences to others (i.e. dock damage, capsizing small craft, and bank soil erosion)
- Always "give way" to (pass behind) non-powered boats such as sailboats, kayaks, canoes, and rowing craft. (200 ft. is a good gesture)
- Ski and raft towing boats should never go beyond 100 ft. of their disabled skiers and have an observer aboard as well as a driver.
- Keep noise within its proper perspective. Sound carries a long distance on water. Keep radios and recorders at a low volume.
- Pick up any "man-made" trash or litter you see floating in the water.
- Always stop and offer assistance to stranded boaters.

Water Quality

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phyll. The presence of cyano algae is rarer and is found more at water treatment plants. Cyano algae is toxic. Cyano algae have NOT been found in Lake Glenville. The brown algae are mostly neutral in color but do contain small amounts of chlorophyll. Our water sond does respond to the low level of chlorophyll in the brown algae found in Lake Glenville. A few forms of green algae have been found. Other than the Cyano algae there are no known dangers having algae in the lake and they are a natural occurrence.

The questions become "Is the Secchi Disc data (the water depth that can be seen) related to the quantity of algae found?" And "Why has the quantity of algae changed?" The answer to the first question is yes, but it's not the whole answer. It is also related to the actual turbidity caused by soil contamination. The major seasonal changes in visual water depth measurements is due to changes in the quantities of algae. The answer to the second question is - - It is currently believed that the increased quantity of algae is related to the change of lake levels that has occurred over the last 10 to15 years. There has been is a significant reduction in dilution of the algae growth. More study is needed to confirm this simplistic answer.

Don Henson on Lake Glenville collecting water samples with the sonde.

Lake History, continued

A Love of the Mountains

Claudeen Boyd

There is no evidence that there were any permanent Indian settlements in the Glenville community, but there is evidence that permanent and prominent Indian settlements existed outside of but fairly close to the Glenville community. The closest known permanent Indian settlement was Tuckasegee near the junction of N.C. 107 and N.C. 281 at the confluence of the East Fork and the West Fork of the Tuckasegee River. The West Fork of the Tuckasegee River has its beginnings in the Glenville Community. The waters of Pine Creek, Mill Creek, Norton Creek, Hurricane Creek and Cedar Creek flow together to form a river which prior to the construction of a dam cascaded down a 100 foot waterfall and rushed on down to its meeting with the East Fork. Until it was deliberately burned down in 1781, Tuckasegee continued to have a Cherokee presence. Today only the site remains. Nearby is Judaculla Rock with prehistoric carvings of symbols whose meanings have yet to be deciphered. The Cherokee attribute the markings to Judaculla, a legendary giant who leapt down from his home on Tanasee Bald to Caney Fork Creek. Artifacts found in a field near the stone indicate that a small village or camp might once have been there. Another important Cherokee settlement and center, Nikwasi (Nequassee), present day Franklin in Macon County, figured prominently in some of the Cherokee Indians earliest meetings with the Europeans. While permanent Indian settlements seem not to have been a part of the history of the Glenville Community, the fact that this land once belonged to them is documented in two early settlers' deeds from 1873 and 1875 showing that the land that they purchased was "part of the land acquired by Treaty from the Cherokee Indians, and sold in obedience to an act of the General Assembly of the State."

Since permanent Cherokee settlements tended to be near rivers in the fertile valleys, Cherokee hunters had to look to the mountains for much of their game. The hunters used bows and arrows for the big game such as deer and bear and blow guns for the smaller prey such as squirrels and rabbits. They used spears and nets for fishing. The entire hunting process included prayer. They prayed before, during and after the hunt. Their beliefs in the sacredness of all life and their oneness with nature did not allow them to hunt or fish for more than what was needed to sustain them. The hundred of arrowheads found in a field off Pine Creek Road, the report of pottery pieces found in another field near Pine Creek, the "multitudes" of arrowheads found on a 2½ acre field off Yellow Mountain Road each time it is plowed, and the arrowheads and tools found near a stream up on Big Ridge off Fowler Road are only a small fraction of all the artifacts to be found in the Glenville community. The large number of artifacts found in the area attest to the fact that not only did the Cherokee Indians hunt and fish and camp in the community but they also did it for hundreds of years.

The above excerpt is from a Glenville Historical Research Project, written by Claudeen Boyd. For additional information on this and other research projects, please contact Glenville Historical Society members.

The Glenville History Project was launched in 2009 by FLG member Woody Haynes when he became concerned about losing the history of Glenville. Old-time residents experiences and recollections are being recorded and preserved. Anyone who has Glenville, Hamburg Township and the surrounding area historical information to share is asked to please call Woody Haynes at 903-255-0327 or Carol Adams at 828-743-1658. FLG wish to thanks this group for allowing us to publish stories in our communication with our members.

GIVE GLENVILLE A BOOST

Glenville Historical Society is selling Glenville bumper stickers. They cost $3.00 each and are an oval shape with the leters GNVL. You can purchase the stickers at our FLG breakfast or call Carol Adams 743.1658.

Water Quality

A New Look at Old Data

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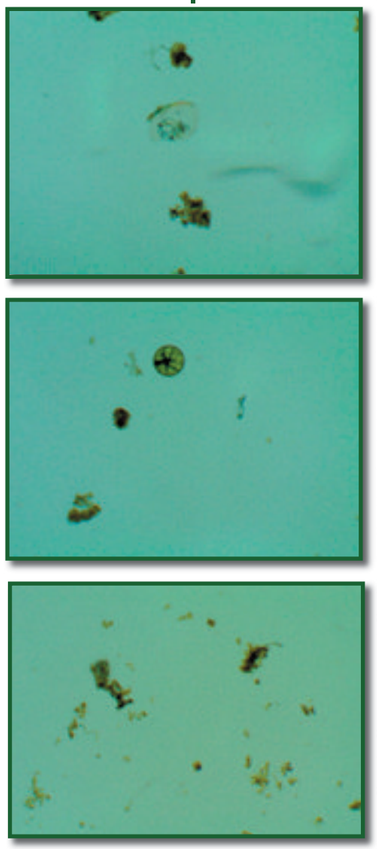
our water sond we can gather depth, temperature, pH, turbidity, dissolved oxygen, and chlorophyll. Don gathers and reduces the data to usable information. One of the lake concerns is seasonal hypoxia of the subthermocline. (lack of oxygen in the deeper colder water where the Walleyes and Trout would prefer to be) Don has had family members assisting him for the many hours of data collection. There are times he can use some volunteer help.

A little history. The founding of The Friends of Lake Glenville occurred at the threat of the potential of having a waste water plant installed near the lake that would have the effluent being piped into the lake. That was the wake up call. It became abundantly clear to those living around the lake that there would be more assaults on the beauty and clarity of the lake. The first step was to do a risk assessment for the lake and it's watershed. A list of potential risks was generated with an estimate of impact severity and probability of occurrence. With few resources and a huge job to do, it was decided to start a stream water testing program using macro-invertebrate testing under the assumption that if the inflows were clean the lake would remain clean. This assumption is still valid but is not complete.



Macro-invertebrate testing collects all the insects in one square meter of stream bed. The number of species and the quantity of each specie found provides a very sensitive indication of the stream water quality. A change in findings indicates a change in the stream quality. The type of insect change indicates what change had occurred. Several volunteers completed training and the first sampling matched within 90% of the results of the State Biologists findings. The State Biologists were conducting the study for the "High Quality Water " designation for the watershed. Macro-invertebrate testing was conducted over seven years. It can take 2 to 3 hours to do one stream sample.

Our stream water testing program was then changed to chemical analysis of the water samples. Samples were taken from each of the major inflows each month. The samples were taken to the Environment Quality Institute laboratory at UNC Ashville. This program was known as the VWIN program that covered several hundred water sampling locations in western North Carolina. Our sampling, done monthly, from six and sometimes seven locations over a ten year period has provided information about 13 water parameters. Our data has been included in the North Carolina, Little Tennessee River Watershed Assessment Report. And, we have an excellent reference for any future changes. The VWIN program was discontinued by UNC-Ashville and is now being done by a new non-profit. This has been a conversion from the original lab equipment and personnel.

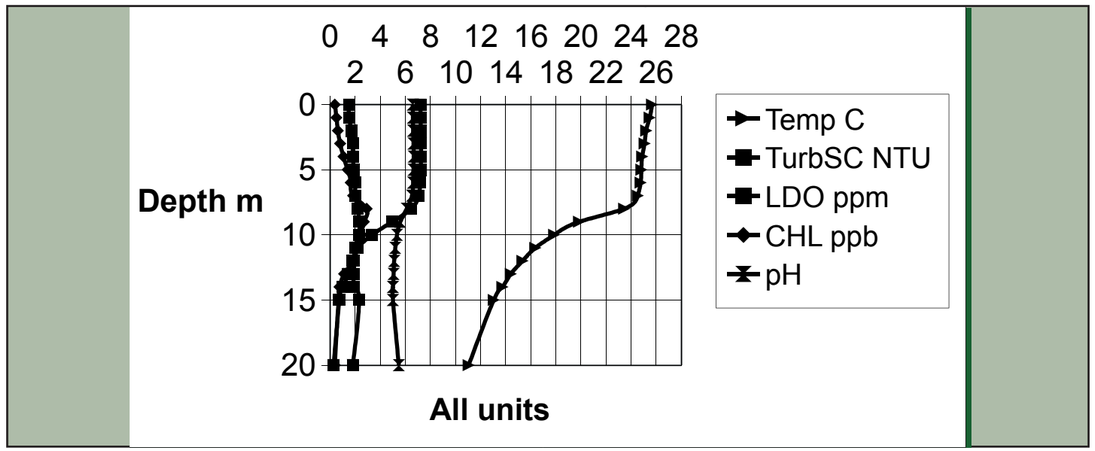
We have gained a good understanding of the inflow streams. They are typical, healthy, mountain streams with low nutrients, a slightly acid pH, with a low acidity reserve and an excellent insect population. Typical turbidity is very low with high rainfalls creating increased turbidity. And of course human interference creates the greatest turbidity flows. We have learned that it will take about 10 years for a stream to recover from a major soil disturbance- such as the Highland Cove indecent or Hurricane Ivan. And, caution is needed to prevent over-fertilization, as excess nutrients will end up in the lake. Just as excess turbidity will end up in the lake.

The lake water quality effort took a gigantic leap with the addition of the purchase of the water sond. The automated recording of the multiple parameters provides a window to the understanding of the Lake's dynamic conditions and communities. The example shown is

from one of the recorded sets of data that begins to show the relationships and complexity of the data. The thermocline – change of temperature - curve at 9 meters is key. The dissolved oxygen curve determines where life will or will not be supported. The walleyes like the deep cold but need the oxygen. The chlorophyll curve shows relatively low chlorophyll but shows the depth of the concentrated area. The brown algae have little chlorophyll but the growth is concentrated at a specific depth - 8 meters. (see included chart).

Don Hansen's Lake water quality data collection over 17 years had shown starting vertical lake water clarity of 25 ft that over time had been reduced to 12 ft; to 9 ft; to 5 ft after and after hurricane Ivan to 2ft. We are now seeing the clarity range from 12ft to 5 ft through the summer season. A study of the lake turbidity was done. The Lake Turbidity Study Team effort assembled data from many sources and observations. Six sources of lake turbidity were identified and an attempt was made to estimate the amount of turbidity being contributed from each source – such as shoreline erosion, stream turbidity, road runoff and boat wave action. The numbers didn't close. A search was started for methods to measure each of the contributions. During that search another factor came to light. It was determined that there was algae in the lake water and it's contribution to lake turbidity needed to be understood. So, two years ago another lake water quality effort was started to understand the turbidity contribution due to algae growth.

So --Into a new water testing arena. What are we looking for - and where - and how? The first step was to purchase a plankton net with an eighty five micron net. A microscope was available. Oh yes this is all microscope work. The first sampling was taken at nine locations across the lake at a depth of 4 ft.. The same species were found at all locations. The samples were a brown type of algae that had a smattering of chloroplasts - chlorophyll. A half a dozen species were found all with very little chlorophyll. The microscope work is done at 40X and 100X. The summer effort of 2010 was cut short.

Work was restarted for the 2011 summer season. Another sampling at nine locations. And then samples were taken at one location but at 4 ft intervals down to 32 ft. This was to determine if there were species differences at various depths and the quantity of algae below the thermocline. There appeared to be differences in quantities with depth but no differences in species. It became obvious that a method to take pictures of these samples was necessary. A digital microscope camera was purchased. And then the summer efforts for 2011 were also cut short. But, there were several samplings done using the camera in the fall-with a steep learning curve. Pictures of several species of algae show the configuration diversity. Several on-line galleries have been consulted to identify and name these species. That work is continuing.

A little background about algae. There are an estimated 10,000 species of salt water algae species and there are an estimated 4,000 fresh water algae species. There are several general categories of algae referred to as green, brown and cyano; and the species can be phytoplankton (plant) or zooplankton (animal - mobile). The most noticeable type of algae is the green algae seen on the water surface and has an abundance of chloro-