priate actions aren't taken, we are threatening, if not our, then their very existence.

Pat Griffin, President 2008-2018 ACLT Board of Directors

ACLT came to appear to me as a microcosm of the entire conversation about what is precious about the environment in our everyday lives as well what is necessary to protect the entire planet. It also stood right in the middle of the debate as a potential hinderance to economic growth and jobs. This tension is as palpable right here in Calvert county as it is throughout the country. Many of our political leaders locally and beyond are willing to dismiss the science and ignore the threat our behavior is to the environment in pursuit of financial gain.

There is an aspect of this argument that is not without some merit. However, when grossly manipulated for the benefit of a few, I sincerely believe we must be fearless in our opposition. It is as Miss Swift says and suggests, there are times we may not be able to allay all our fears or doubts but we must act nevertheless.

Though I don't have any special knowledge, after being in politics for the last forty or so years as a Democrat, folks occasionally ask me what they should do to respond to the current political environment as it relates to any number of issues. I respond by saying what you do is less important than how passionate and convinced you are that your actions are necessary. I am not suggesting that we act recklessly, but I am urging we reflect deeply about what is at stake, particularly for the environment, and act as if we have no fear.

My farewell wish for ACLT is that it remains true to its core mission of preserving as much land as possible in the Parkers Creek and Governors Run watersheds. However, I hope it is also fearless in the leadership it provides throughout the county to encourage support for its important work and to defend against policy threats designed to undermine it. My political experience has taught me many things. One of the most important lessons that I have attempted to bring to my responsibilities at ACLT is that there is always an outside game. By this I mean that especially in a hostile environment, good facts alone, without the courage to promote and or protect them, rarely prevail.

Thank you!
Pat Griffin

Around ACLT

Forest Diversity Survey: Understanding How Land-Use Affects Forest Composition

Over the past year, ACLT staff and volunteers have been working on a science initiative to establish a watershed-wide baseline of diversity in the Parkers Creek Preserve. Diversity assessments in this initial baseline include tree, fish, amphibian, reptile, insect, and bird species. Under the guidance of ACLT's Science Committee, former Assistant Land Manager, Michael Molina, piloted the first baseline assessment, the Forest Diversity Survey, in fall of 2017. The goal of the Forest Diversity Survey is to document forest species diversity on 40 permanent 1/4th acre plots located throughout the preserve. After considering factors such as topography, land-use, and soil types, plots are chosen to include a variety of ecological features to obtain the most representative sample of the forests in the Parkers Creek and Governors Run watersheds. Once determined, plot boundaries are permanently marked with rebar and trees

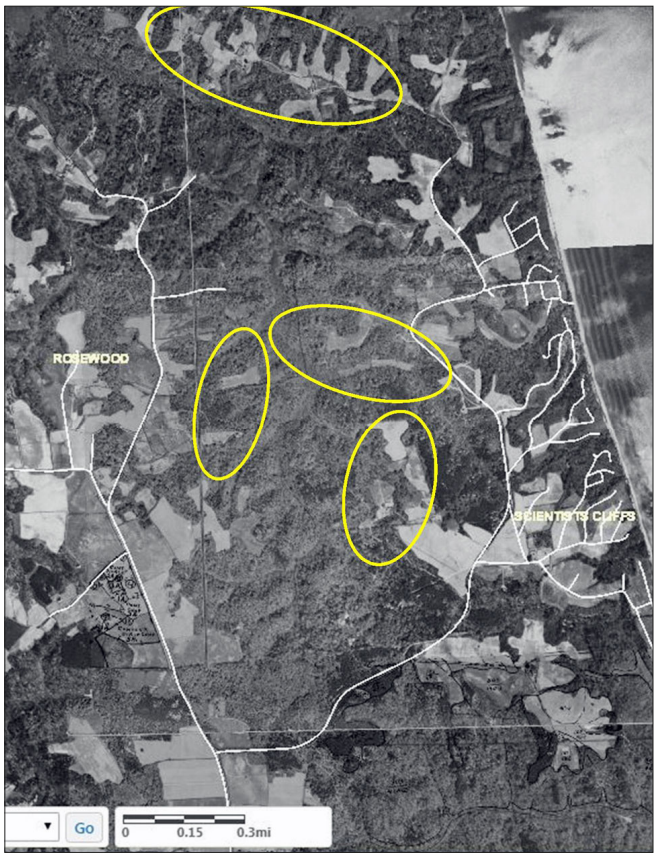
Figure 1.1 2018 Forest Diversity Survey Plots. The green outline is the Russell/Commodore property boundary, the orange outline is the Gravatt West property boundary, and the red outline is the Gravatt East property boundary.

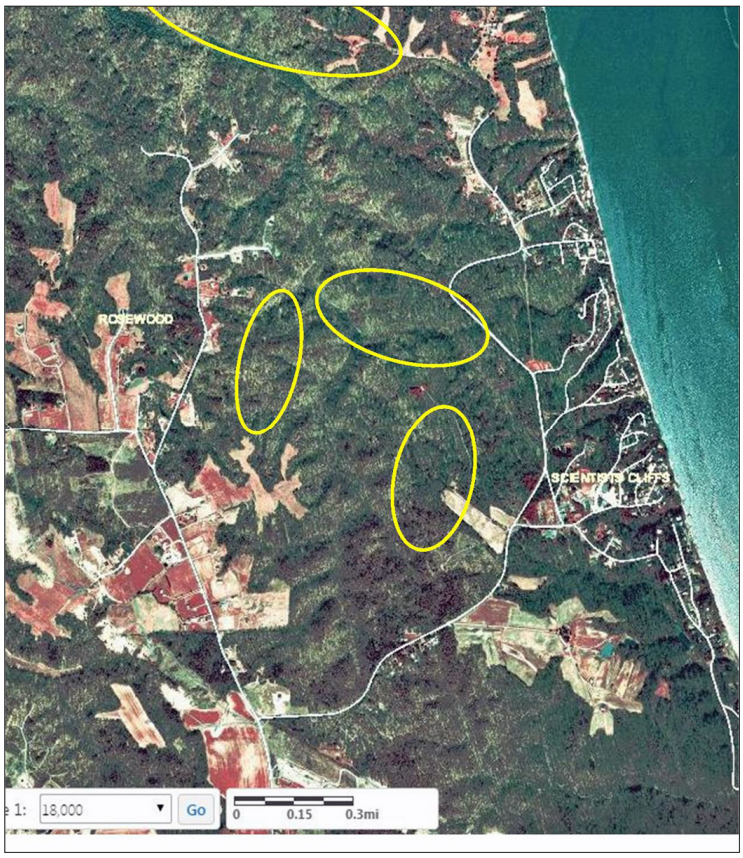
within each plot are given unique identification tags. For all first year plot measurements, parameters include diameter at breast height (DBH), species identification, and physiological/structural conditions for woody plants larger than 1 inch DBH. The long-term goal of this study is to conduct a Continued Forest Inventory (CFI) and remeasure the DBH of every identified tree in each plot every 5-10 years and include ancillary data such as tree height, age classes, biomass, annual carbon sequestration, understory vegetation abundances, soil textural and chemical analysis, and arthropod/mammalian browsing impacts. By undertaking this CFI, ACLT can monitor and understand the effects of climate change and anthropogenic stressors on its forested properties. Information gathered from this study will guide land management actions to continue protecting our preserved properties and target areas of greatest concern.

During spring and fall of 2018, twelve plots spanning three properties on the south side of Parkers Creek, (Gravatt East, Gravatt West, and Russell) have been marked, inventoried, and measured (see Figure 1.1). Studies such as this one are important for understanding how land-use changes affect forest composition and diversity, specifically species richness and evenness. Preliminary assessments of the twelve plots surveyed last year provide an opportunity to analyze plots that were clear-cut for agricultural or timber harvest purposes versus those that have remained forested over a span of almost 100 years. Aerial photos of Calvert County (see Figures 1.2 and 1.3) that are available to the public through the Calvert County GIS services (*http://www.co.cal.md.us/index.aspx?NID=1537*) show how the landscapes of our south side properties have changed over time. Aerial photos from 1938 and 1957 indicate that three of the twelve plots, GWP3, GWP5, and GWP6, were void of trees during these years. The 1997 aerial photo shows that by that time, all three of the plots were either established forests or in the early successional stages of forest regeneration.

Completing the first stages of the Forestry Diversity Survey required significant staff and volunteer time and ACLT thanks Baltimore Gas and Electric (BG&E) and Cove Point Natural Heritage Trust for funding this stage of the project. ACLT also thanks all of the volunteers who dedicated their time and effort to identify and tag all of the trees in the 12 plots that have been sampled to date. Stay tuned for results from preliminary assessments of relative abundances, diversity indices, and more that will be found in the upcoming spring 2019 newsletter.

Taylor Roswall
ACLT Stewardship Coordinator





Left: Figure 1.2 Aerial photo of the south side of Parkers Creek in 1938.
Right: Figure 1.3 Aerial photo of the south side of Parkers Creek in 1997.