Charles J. Lapham (1934 – 2009)

By Ronald L. Jones, Eastern Kentucky University

Over the past decade Charles J. Lapham has been one of the most important figures in the Kentucky Native Plant Society, in Kentucky botany, and in the botany of the southeastern United States. Charlie, as he preferred to be called, passed away on October 26, 2009, of non-Hodgkins lymphoma. He had been in poor health for several years, mostly related to heart disease and diabetes, and was only recently diagnosed with lymphoma. In recent emails he informed his close acquaintances of his situation, and was characteristically matter-of-fact in describing his time remaining. He expected to have a few more months, or maybe a few years, but he suffered a major setback on Wednesday, the 21st, and never recovered. He was 75 years old.

Charlie and his wife Arlene had lived for the past 20 years in Glasgow, Kentucky. He was born in Fort Edward, NY, grew up in Glens Falls, NY, and lived many years in Lincoln Park, NJ. Charlie graduated from Clarkson University in Potsdam, NY, with a degree in electrical engineering, and worked many years for Standard Motor Products in Long Island City, NY, before he was transferred to Kentucky. Charlie had a life-long interest in science, especially botany, and he began to explore this interest with great enthusiasm after he retired.

Both Charlie and Arlene became active in the Kentucky Native Plant Society in the mid-1990s, and both began taking classes in the KNPS Native Plant Certification program, and were among the first group to receive certification in 1997. In those days the participants had to complete a research project, and Charlie's project was to set up a basic database program for herbarium data management. Charlie and I had discussed databases on a couple of occasions, and he became very interested. This was at a time when university herbaria across the nation were considering the pros and cons of investing in database programs for keeping track of all their dried plant specimens (often numbering in the thousands or even millions), and also to improve capabilities of generating labels and of making maps. Most software at that time was expensive, hard to learn, and difficult to maintain. In Kentucky, several herbaria were investigating the possibilities. We had about 40,000 specimens in the EKU Herbarium at that time, and I suggested to Charlie that he help me set up a database using Microsoft Access. He jumped at the idea, got a manual, taught himself Access, and began working on the program. He later told me that his job in New York had required him to construct similar databases to keep track of auto parts, and that keeping track of herbarium specimens was not that different.

Soon he had a workable system. It was named *Index Kentuckiensis* (IK), and it would allow the inputting of all the data from a herbarium label, sort it in various ways, construct labels, and make maps of the specimen locations using a free online mapping program called MicroCam. This IK system has undergone numerous revisions over the past decade, with Charlie making it more and more sophisticated. Charlie and I began going to meetings of the Association of Southeastern Biologists and giving talks about the capabilities of the software. Other universities were interested, and soon IK was being used at several institutions around the south, and eventually at several institutions across the nation. We were offering it free, and Charlie usually ended up traveling to the institutions to help them set it up. Charlie worked on IK tirelessly, for many years, kept attending meetings and demonstrating the capabilities of IK, and through his efforts many institutions got their first exposures to herbarium databases. Charlie was very sensitive to the "philosophical" differences among taxonomic botanists, especially in how they chose names for their specimens, and worked hard to provide a program that would allow individual flexibility. He was also among the first to use dropdown menus that allowed the user to pick from lists of scientific names, collectors, and other items from a list, which cuts down on typographic errors tremendously. He developed such a high degree of databasing expertise that he was able to converse at the highest levels with other databasing specialists across the country, and in some cases he was the one providing the instruction. As one of the first developers and promoters, Charlie deserves great credit for his services to the botanical community.

Charlie in the field.

Charlie also took a very active part in the Kentucky Native Plant Society, serving both as a board member beginning in 1994 and as Vice-President in 1997. He helped organize field trips, wrote articles for the newsletter, and in many ways contributed to the continued success of KNPS. Charlie also came up with a database for keeping track of KNPS members and for generating mailing labels, and it is still used today. Charlie and Arlene were active in attending field trips and workshops, and Charlie was especially interested in Eggert's sunflower, which grew in the nearby Mammoth Cave area. In one big project, Charlie took a major role in organizing a KNPS activity to rescue a roadside population of the sunflowers that was in jeopardy from highway construction. Charlie helped dig up and transplant the whole population of sunflowers to a protected site within the national park. Charlie and Arlene regularly attended the spring and fall meetings of the KNPS, and Charlie especially

loved the spring wildflower meetings at Natural Bridge State Park. He often participated in rigorous hikes, like walking up to Natural Bridge, which I thought might be too much for him, but he always seemed to keep up with the group and enjoy the outings immensely. Only in the last couple of years, with his health problems increasing, has he failed to attend the annual meetings.

Charles J. Lapham is listed on the title page of *Plant Life of Kentucky, An Illustrated Guide to the Vascular Flora,* as Technical Associate. He is listed because it was through his efforts that about 4,000 images of line drawings were obtained from the 1913 edition of Britton & Brown's classic book on the flora of the northern United States and Canada. These images were in the public domain, but were not easily accessible. Through his connections to a data services company in California, Charlie arranged to send a copy of the 3-volume set to India, to have the black and white illustrations scanned, and then processed into a searchable format. These images were copyrighted as part of the *Index Kentuckiensis* application, and eventually nearly 2,000 of these images were used to illustrate *Plant Life of Kentucky*. So it was through Charlie's expertise and his business associations, that these illustrations were obtained, and without his help, it would not have been possible to gather so many illustrations together so fast. It is the illustrations that help to make the *Plant Life of Kentucky* so useful for so many people, and I am forever indebted to Charlie for his tremendous assistance.

Once word got out that we had a CD with about 4,000 illustrations, a number of people and institutions expressed interest in obtaining a copy. The PLANTS database web site, (http://plants.usda.gov/) which is today the major web site for botanists to check for information on nomenclature and distributions of North American plants, agreed to pay a fee to use the IK/B & B digital images. This was arranged in the name of the Kentucky Native Plant Society, and today, when a species from eastern North America is selected for viewing, in most cases there is an illustration that states "Courtesy of the Kentucky Native Plant Society." The substantial check that was received from the PLANTS database site was donated to KNPS, helping to fortify the savings account, and providing much-needed funding for a number of ongoing activities.

Charlie's legacy is thus far-reaching, from his local work on saving endangered species, to his state-wide efforts with KNPS, to his regional and national influence on herbaria and botanical science. His involvement in regional botany was fortuitous in many ways for me personally, not only from the standpoint of my book, but for all his efforts with building databases. We still use his IK database at EKU, and now have entered over 50,000 records. We plan to have all our 75,000 specimens databased in the next few months. When finishing up the historical section of *Plant Life of Kentucky*, I devoted a section to private citizens, and Charlie was one of two individuals that I selected as having made the greatest contributions over the last 50 years to botanical science in Kentucky. The book contains a description of his accomplishments and a photo of Charlie, and is indicative of the high regard that I, as well as many other botanists across the nation, held for Charlie.

Charlie received an award for service to the KNPS by Dr. Ron Jones and then-president Dr. Dave Eakin.

Charlie is survived by his devoted wife of 54 years, Arlene, his brother, Jerome , his five children, Peter in Glasgow, Suzanne in NY, Thomas in Glasgow, Benjamin in NY, and Jonathan in Glasgow, and their families, including four grandchildren. His was a loving, closeknit family, and it is apparent that his passing touched many; a series of memorial gatherings were held on October 29 by his family and many friends from across the country. In an internet obituary, his family writes "Charlie valued honesty, integrity, hard work, and was at times a self-described connoisseur of silliness. He was never without a project."

His family also noted that "In keeping with his love for science, he has donated his body for medical study at the University of Louisville." His family asks that donations be made to the Nature Conservancy in his memory.

In one of his last emails, Charlie lamented the fact that botanists cannot seem to make up their minds what they want—do they want to finally get their data into consistent formats, or endlessly discuss alternatives. He closed by saying "what we need to do is to put botanists together to discuss this and wait for smoke to come out of the chimney."

And that is what Charlie was about, and that is his legacy—when facing a complicated problem, decide what you want, and attack the problem with intelligence and hard work and good humor. Then nearly anything can be accomplished. That is what I will remember about the effect that Charlie had on our botanical community, how he more or less just appeared from nowhere, just plopped down here amongst us botanists, looked around and figured out what kinds of problems we faced, took up the reins, and showed us all how it should be done.

Charlie was funny, brilliant, and sometimes cantankerous. He was unique, and irreplaceable, and will be missed by all.