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Remembering Robert L. Wilbur

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I first started graduate school in what was then the Botany Department at Duke in 1968. It was the height of the Vietnam War, and I was drafted into the U.S. Army three weeks after starting the fall semester. I had a teaching assistantship which would have been lost altogether so RLW and the then-chair of Botany, Dr. Terry Johnson, went to bat for me and asked that my induction be delayed so that I could at least finish my first semester with university support. The request was granted but I had to depart in late January of 1969 not knowing what my fate would be. RLW was very disappointed and sympathetic, but we had no recourse. Before I departed RLW assured me that my teaching assistantship would be available upon my return in two years. I was delighted that this was even a possibility. In the course of my botanical training, I was blessed with strong, loyal, and committed mentors who provided stellar examples of what training that next generation was all about. RLW was one of these shining lights. I kept in touch with RLW during my Army service so he knew that I was intent on returning to graduate school at Duke when my military service ended. I completed my military service in late February of 1971. A couple of months before that time, while I was still stationed in the Republic of Korea, I wrote to RLW to let him know that I was looking forward to resuming my graduate studies. I heard from him within a week of my return to Tampa. Although I was slated to do a master's thesis when I started in 1968, RLW felt that I should just go directly for the Ph.D. since I had in his words "lost two years." He suggested that I come to Duke shortly after returning to Tampa, so I took a bus to Durham in early April of 1971 with a plan to develop a proposal to work on some group of tropical plants for my doctoral thesis in Central America. This was to be supported by an NSF training grant that had been awarded to Duke at the time. Early in his tropical field work experience RLW appreciated the richness of the Central American flora and wasted no time in targeting families and genera that he thought needed taxonomic study and would make good doctoral dissertation topics. His one rule of thumb was that it would be preferable to work on a group that was showy, fairly common, and easy to collect. Not doing general collecting was unthinkable to RLW. He always did general collecting and expected his graduate students to do so as well. I remember him complaining about other graduate students (not his) whose field collections would "fit into a thimble." He strongly encouraged me to work on melastomes since the family was showy, seemingly everywhere, taxonomically challenging, had few dedicated students at the time, and he had already identified some interesting genera in need of attention, especially the genus *Monochaetum*. The then-reigning neotropical specialist of melastomes, John J. Wurdack, gave us his blessings since most of his attention was at that time focused on the melastomes of South America.

In late May of 1971, RLW, John F. Utley, and I were collecting in the backcountry of

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Verapaz Department, Guatemala. One of the most memorable plants we saw on that portion of the trip was a showy tree about 7 m tall (over 20 ft.) that was full of large inflorescences with small white flowers along Route 7E which runs east and west in the Dept. of Alta Verapaz. We were curious about its identity since we had never seen it before, so we wanted to make a collection. John immediately took out his machete and climbed on the tree and began hacking away at some branches. It seemed like wood chips were flying everywhere, some of which hit RLW on the face and a few hit me on the wrist. As was so often the case when we encountered plants with small fragile flowers, RLW sat on the roadside and put several specimens into the press. At the time we were all puzzled about the identity of the tree with compound leaves and small white flowers. Early the next morning we awoke to find RLW sitting up in bed. His entire face had become so inflamed and swollen that he could not even open his eyes. It was only then that we realized that our prize tree might be the culprit. RLW was in no shape to continue our field work so we got him on an urgent flight back to the States so he could seek medical attention. We learned later that he was given a cortisone shot and recovered completely within a couple of days. RLW later identified the plant as *Rhus striata* (now *Toxicodendron striatum*) which was notorious among local people for causing severe allergic contact dermatitis with blistering and swelling when it was cut or burned. John and I continued our planned field work to Belize. Belize (then British Honduras) was not a tourist destination back then. Finding suitable lodging in the back country was not always easy and most of the small guest houses we stayed in had no window screens, so the mosquitos feasted on us. About a week into our Belize field work I started to get what seemed like a minor rash that started on my left wrist. I assumed I had developed a reaction to all the mosquito bites we had experienced but the rash gradually spread to my arms and chest. Since so much time had elapsed between our initial encounter with the *Rhus* in Guatemala and the outbreak of my rash I did not make the connection. I had never had contact dermatitis with any plant previously. I sought medical attention when I got back home to Tampa before returning to Duke. My family doctor diagnosed my rash as contact dermatitis as well but at the time cortisone wasn't always the recommended treatment. My doctor recommended that I take oatmeal baths twice a day. This lasted for a month and it was a month of misery. I even had to delay my return to Duke because of it. A specimen of the plant that caused all this discomfort is preserved in the Duke Herbarium under RLW's collection number of 14899. Ironically John Utley, our companion who climbed the tree and had the most contact with it, never developed dermatitis.

One particularly memorable trip was to Guatemala in 1972 with Don Stone who was exploring a possible field station in the country for OTS at the time. I joined Stone on this trip to look for *Monochaetum*. RLW was also on this trip to do some general collecting. Don Stone had a reputation for being an intrepid driver in the mountainous terrain of Central America. On that Guatemala field trip he wanted to ascend the slopes of Volcán de Agua near the city of Antigua in search of Juglandaceae. There was an unpaved road up the volcano that was especially treacherous in parts. At one point Stone misjudged the width of the narrow unpaved road and our rear tires started sliding off the road surface into what was a steep drop off. All of us except Stone exited the vehicle wondering how we would possibly save it from going downslope. RLW was not always happy with

Stone's driving on the few trips they did together. During that Guatemala trip I vividly recall how RLW kept reminding Stone that he had six children at home!!! Fortunately, the Chevrolet Suburban (a Duke vehicle) that we had was equipped with a winch and cable so we attached the cable to a large nearby tree and were able to extract ourselves from what we were sure would be a disastrous loss of the vehicle since it was teetering off the side of the road.

RLW typically relegated all driving duties in the field to his graduate students. He would only drive himself to mass on Sunday mornings if we were in a town offering such services. Our field days were long ones. Up before 7 am for sure and out after breakfast. In the early 1970s many of the mountain roads in Costa Rica and other Central American countries were unpaved, slow going, and a bit of a challenge. I always wanted to descend the mountain roads before sunset because pea soup fog would typically envelop the mountainous terrain and it was common to be sandwiched between large slow moving semi-trucks on the Cordillera de Talamanca destined for San José in Costa Rica. It made for some adventurous and in some instances dangerous driving since other motorists would often try to pass us and those other huge semi-trucks. We were not always successful in getting RLW to stop a day's collecting before sunset so we spent many an evening driving those treacherous, fog-shrouded, unpaved mountain roads in the dark without streetlights. Our day's work was never done by dinner time. We then had to write up field notes, press the plants and put them on the driers. We were rarely done before 11 pm each evening. I always marveled at RLW's work ethic and his drive to learn about and develop a good representative collection of Central American plants for the DUKE herbarium. I just chalked this off as part of the experience of doing field work in the tropics. In retrospect I am immensely grateful that I had those experiences and the opportunity to learn about the neotropical flora. Following RLW's example I have collected generally in every country in which I have done field work over the past 50 years if this was allowed by my permit specifications. Way back in the 1970s permits were never required and general collecting was easy to do. I suspect that RLW passed this love of tropical plants on to many of his graduate students, all or most of whom went on to successful botanical careers across the nation. Learning about plants beyond my special interest group served me well when I began teaching plant systematics as an assistant professor at UCLA and later when I moved to a natural history museum (CAS) that the public gravitated to for information about plants both locally and from around the world. If it wasn't for RLW, I would have never ended up in California. In 1973 RLW was contacted by entomologist Henry Hespenheide of UCLA who earlier had an interest in Caribbean orchids. Hespenheide wanted to know if RLW had a prospective graduate who might consider applying for the systematic botanist position being vacated by Mildred Mathias, a longtime professor at UCLA. RLW got the idea that I should apply for this position but I was many months from completing my degree and felt it was clearly a long shot. Every afternoon for a week and a half RLW would visit me at my work station on the second level of the old herbarium asking if I had applied for the position. I was not particularly interested in moving so far away but RLW kept badgering me because he thought it would be a good position. I finally decided to apply, not because I was terribly interested in the position, but merely to keep him from continually prodding me. In the cover letter to my application I

highlighted the fact that out of fairness to their other applicants I wanted the search committee to know that I was months away from finishing my thesis. A week later I got a phone call inviting me for an interview. The rest is history. This is just another example of how RLW looked out for his graduate students from beginning to end and did what he could to see that they were suitably employed.

James L. Luteyn
New York Botanical Garden

Looking back upon my professional botanical life, I can easily single out three men who greatly influenced and inspired me—Richard W. Pippen, Donald E. Stone, and Robert L. Wilbur. I sincerely wish to convey to these men how honored I am to have known them and how appreciative I am for all they have done for me, for my life, and for my career. Without them—their attention, their guidance, and their friendship—I don't know where I would be today. I only wish I had written this note earlier so that Don Stone and Bob Wilbur had had the chance to read it. I'm glad at least that it's not too late for Dick. Thank you always, my dear friends! During the years 1966–1970 I pursued my undergraduate studies at Western Michigan University (WMU) in Kalamazoo, Michigan, my home town. Richard W. Pippen helped me to enroll in every available botany course at WMU, including graduate courses, and introduced me to some of the area's outstanding systematic botanists—Drs. R. McVaugh, W.H. Wagner, and E.G. Voss from the University of Michigan, and J. Beaman from Michigan State University. "Doc" Pippen gave me abundant personal attention and skillfully advised me on all matters of study. During those years while I was an undergraduate, Doc taught me the basics of plant taxonomy, local floras, botanical revisions and monographs, how to use the herbarium, how to mount plants, how to collect and press plants, how to write a field notebook, etc. I developed a deep appreciation of not only taxonomy but also anatomy, morphology, and plant life cycles. He took me to the Seattle International Botanical Congress in 1969, where he introduced me to several staff members of the Dept. of Botany at Duke University, including Don Stone, who took an immediate interest in me and strongly emphasized Duke's highly rated botany department as a possible place for my graduate studies. Shortly before Thanksgiving Day, 1969, Don called me and told me that he could arrange an all-expenses paid trip for me to visit the Duke campus over the holidays. He would meet me at the airport, be my host, show me the campus with its facilities, and I could stay in the home of several of the botany graduate students. At Duke, Don introduced me to Dr. Robert L. Wilbur. As encouragement to attend Duke, they offered me a National Science Foundation Graduate Traineeship, a three-month plant-collecting trip to the Republic of Panama my first summer at Duke, an opportunity to have Wilbur as my graduate advisor, an office to share with only one other graduate student, and finally they would arrange for me to live in a house with several other graduate students. That fall, I decided to apply to Duke and was accepted. My life was about to change.

I attended Duke University from 1970 to 1975 with Robert L. Wilbur as my mentor, and received both an M.S. and Ph.D. in botany. In early June 1970, one week after arriving in Durham, I was on a plane to Panama for three months, based in the Canal Zone and at the Smithsonian Tropical Research Institute (STRI). While there I collected plants for

Duke University—the first month with Wilbur, the second with an undergraduate student, and the third month alone. Our plant-drying operations took place at the U.S. Army Tropic Test Center (TTC) facility, next to the Miraflores Locks of the Panama Canal, where we could observe ships coming and going at all hours of the day and night while we pressed our plants. For our field trips, we had full use of Robin Foster's dependable, 4-wheel drive Jeep Wagoneer. In that first month I learned all about Robert L. Wilbur—kind of a crash course and one that I know to some will bring back shivers when they reminisce about those years! In the field, Dr. Wilbur taught me how to collect shrubs and trees, (until then I'd collected mostly herbs in temperate Michigan), and in sets with several duplicates for herbarium exchange. He taught me how to press plants in an artistic way using both hands with all 10 of my digits, making "full" sheets that were well spread out and botanically presentable, not wasting any plant material in the process, including lots of extra flowers for later dissections, and with no plant parts sticking out of the sides of the field press. He taught me how to carry at all times 1–2 field presses (one under each arm), which by the end of the day were full to exploding with collections, and how to sit on the bare ground or on top of my spare plant press, in rain or shine, to field press my collections almost immediately after collecting them, while they were fresh and turgid—*not* in plastic bags stuffed throughout the day resulting in all the flowers falling to the bottom of the bag. He taught me how to make the most of my time in the field, rising at 6:00 am and working late into the night, however long it took, until all the day's collections were processed. He taught me how to feel with my fingers the "just right" best quality newsprint paper for pressing plants that absorbed moisture, yet did not fall apart if we were rained on all day, and to choose or cut that paper to fit exactly within a plant press, just the proper size of a herbarium sheet. He taught me what hand clipper was best to use with that "just right" fit for my (denim) pants back pockets. (In 1970 I bought five Sears, Roebuck & Co. hand clippers for about $5 apiece, three with cushioning rubber hand grips, that I continued to use throughout my five years at Duke, during my 33 years collecting for The New York Botanical Garden, and one of which I actually still have in retirement. Three of the others I gave to colleagues, one I lost in the mountains of Colombia!) Wilbur taught me how to spot the flowers of the plants I was searching for along misty cloud forest trails or whizzing along pot-holed, bumpy back roads at near-highway speeds. He taught me how to prepare for the drier a plant press full to over a meter tall, "squaring" it off so no plant parts would stick out from the sides, and then how to fix and tighten the press straps by myself without the aid of others. He taught me how to wet-press plant collections in formaldehyde or alcohol (the more pleasant alcohol, unfortunately, was unavailable in the 1970s and early 1980s) and bundle the plants into plastic bags to ensure that the plants would not rot in the tropical heat before we returned to the drying facility. (On one of our trips we found two of our wet-pressed bags tucked behind a plant oven at the TTC two years after having collected the plants; we dried them and they looked as though they had been recently collected.) He taught me how to pack dried plants for their return shipment to Durham as cargo to ensure they arrived safely with the least amount of damage to the brittle material. Back in the laboratory at Duke, Wilbur taught me all the mechanics of studying dried plants—observing them under a dissecting microscope, taking their measurements, writing detailed and

accurate plant descriptions in a consistent and orderly way. By his example, he taught me how to make notebooks for each of the genera of plants I was studying or hoped to study someday that included photocopies of protologues, illustrations, preliminary keys, notes, and descriptions. He taught me about the International Code of Botanical Nomenclature and how to apply it, and perhaps most importantly for my botanical work, he taught me how to write clearly and concisely in a simple way that could be easily understood. Actually, I shouldn't use the words "he taught me how to … ", because Dr. Wilbur never really sat down and said "Jim, here is how you do this." Instead, he taught *by example* through his research approach and methods, and what a fine example he has been to emulate. I cannot imagine anyone else who I'd rather have teaching me or any better way to approach taxonomy than that which I learned by example from Bob Wilbur. It should be noted, however, that Dr. Wilbur was not the easiest person to get along with (or to impress). His professional standards and expectations were very high, but not unreasonable. He was not always easy to talk to and not one to offer praise without merit. He was very opinionated and had a rather critical attitude towards the botanical community in general. But his door was always open, and he always availed himself to give needed advice, guidance, or discussion. His botanical knowledge was extensive and profound, though he himself was not so keen about the then-modern techniques, such as numerical taxonomy and cladistics. Over the years I had several disagreements with Dr. Wilbur and found myself in his "dog house" on a number of occasions. I knew I was not always his favorite student. I didn't work quite hard enough to satisfy his demands, not enough hours at the microscope, not enough field collections made, too much time with women. During the last summer before finishing my dissertation I wanted to take time off to visit various herbaria along the East Coast—the Smithsonian in Washington, D.C., the New York Botanical Garden, and then Harvard University in Boston—in order to work in those herbaria for a few days, to meet their staff, and to let them know that I would be available for a job the next summer. Dr. Wilbur told me that he did not approve of that trip and that I should stay in Durham to keep working on my thesis and to keep my nose to the grind. I dared to disagree with him on that matter, kept to my plans, and made the trip northwards. Fortunately for me, I made the right contacts and left the right impressions upon the staff at the New York Botanical Garden, because later that fall they invited me to give a talk about my dissertation work. Although he never said so, I think Dr. Wilbur was very pleased and impressed with me from that point on. I will never forget that winter day when I was working at my desk on the second floor of the Duke Herbarium, and Dr. Wilbur's secretary and assistant, Sherri Herndon, called up to me, saying that there was a long-distance phone call for me from Dr. Bassett Maguire of the New York Botanical Garden. Dr. Wilbur's office and phone were at the opposite end of the long hall from where I took the call. It seemed that New York had a position open at that time and in retrospect that the timing of my trip there the previous summer had been just right, because Dr. Maguire asked me if I wanted a job as an Assistant Curator of Botany at the New York Botanical Garden. I told him right there, on the spot, "yes," I wanted the job. The New York Botanical Garden was the best botanical garden in the country and one of the most prestigious in the world! Well, Dr. Wilbur must have been watching me, because after I hung up the phone he started walking down that long hallway towards

me from his office. He could see that I had an optimistic grin on my face, and I said to him elatedly, "I got the job at New York!" He looked at me with bulging, wide-open eyes and a huge smile on his face, he threw forward both of his hands, taking mine in his, squeezing tightly, and shaking them up and down while saying, "Congratulations, congratulations!" in a most sincere and fatherly way. That final winter, Dr. Wilbur and I made one short, last trip together to Panama to collect, and it was noticeable to me how his manner towards me had changed (for the better)—it seemed to me that he treated me more like a colleague. In the years that followed, I knew that Dr. Wilbur had supported me all along and we became much closer friends personally and in our mutual interest the plant family Ericaceae. In fact, I visited him many times at Duke while I was working at New York Botanical Garden and we wrote several revisionary, new species, and floristic papers together. He attended my retirement party in New York in the summer of 2007 and I know that he is as proud of me as I am appreciative of all that he has done for me. Since our "official" retirements, I visited him several times in Durham in recent years, in the Duke Herbarium, where he continued to work. The paper that I have written herein, "Nomenclature and Typification in *Macleania*," gives attention to several areas of particular interest to Dr. Wilbur throughout *his* career, viz., the plant family Ericaceae, taxonomy, nomenclature, history of botany. Thank you, Bob, for all you did for me and for our long friendship.

Tom Daniel
California Academy of Sciences

After taking the two-semester general biology course my freshman year in college (1972–1973), I was considering a career in oceanography so as to take advantage of the University's semester at the marine lab on the coast at Beaufort—one of the reasons I went to Duke. In the course catalog under "Botany," in addition to the class in oceanography, I noticed another one called Plant Identification. That sounded like a fun and easy opportunity to learn the plants I grew up with in the Carolina Piedmont; so for a lark, in the fall of my sophomore year, I signed up for it. The class was definitely fun, but decidedly not easy. Dr. Wilbur's massive mimeographed key to the woody plants of Durham, Orange, and Wake counties seemed overwhelming to a botanical novice, and then there was a quiz on identifying plants every time we were outside—either in the natural areas on campus or in the Duke Forest. But those outings, "keying out" plants, were the fun part. Dr. Wilbur was truly at home and at ease in nature. Sometimes for the "easier" plants on quizzes, he would seem to choose a slightly unusual individual. In one such instance that had many in the class perplexed, I reached out to touch the plant and Dr. Wilbur gently kicked my hand away. Of course, then we all knew that this must be poison ivy (*Rhus radicans*, as it was called then). While there was a lengthy lab once a week during which we traveled to sites mostly in Durham County, we spent half or more of the regular "lecture" classes roaming the campus to identify plants. When it rained, and occasionally even when the weather was nice, we stayed indoors and had a lecture. While some referred to the lectures as "dry," they were incredibly informative and helpful to understanding plant structures, family characteristics, and how systematic botany is practiced. One of the highlights of the class was a long weekend trip to the marine lab

in Beaufort, where we spent a few days learning plants of the coastal plain, including three genera of carnivorous plants. I had to study very hard to learn all the plants to which we were introduced, but that became a joy because I really wanted to know them. I was hooked and eager to learn more about plants. So I became a botany major and eventually asked Dr. Wilbur if there was a taxonomic project I could work on or assist with. He set me up with *Sphenopholis*, a genus of grasses in which he had an interest and for which he had borrowed specimens from several herbaria some years earlier. That eventually became a senior honors thesis, something I had not heard of when I started in on the specimens. Dr. Wilbur advised me on grad schools, with a preference for the University of Michigan (where he earned a Ph.D.). I also applied to Harvard, and someone from the botany program there called him up wanting to know if I was planning to continue studying grasses. Dr. Wilbur told him, "No, I think I've cured him of grasses." Harvard invited me to Cambridge for three days of interviews and tours, but I ultimately decided that Michigan was to be the place for my graduate studies. And Dr. Wilbur was correct, that was the very best place for me. After my first year there, Dr. Wilbur and his former grad student Frank Almeda invited me to accompany them for a month of collecting in Costa Rica. They both provided a wonderful education on how to conduct fieldwork in the tropics. That experience has served me well for my own tropical field studies on four continents.

I did not have the career I'd planned in oceanography, but I did get to the marine lab in Beaufort three times during my undergrad tenure at Duke (in each of the classes of oceanography, plant identification, and plant ecology). However, I am convinced that systematic botany is the most rewarding and personally gratifying profession that I could ever have hoped for, and I thank Bob Wilbur for introducing me to the subject, encouraging and supporting every step in my career, and always being a good and dependable friend.

Foster Levy
East Tennessee State University

My early interactions with Dr. Wilbur were far from cordial. I arrived at Duke as an older student with a master's degree and prior experience with the flora of the southeastern U.S. My Ph.D. emphasis was in plant population genetics, so there was not much overlap with Dr. Wilbur's interests or strengths. I had planned to use my first summer conducting preliminary experiments in the greenhouse. To more clearly focus my coursework, I planned to test out of the botany department's biodiversity course requirement. Dr. Wilbur was to design and administer the exam. He assigned me a grade of ~60% which he said was a Fail. I argued several aspects of his grading and he agreed to reconsider. For one, he agreed that his use of the term "pteridophyte" had no taxonomic standing and therefore my response deserved more credit. He increased the grade to 79% to which I said, "So I pass," and he responded, "No, you're a graduate student and need a B or better—you fail." To satisfy the requirement, I spent that summer at the Marine Lab taking Barrier Island Ecology, a very worthwhile experience but one far afield from my research objectives.

After that summer, Dr. Wilbur never shied from engaging me in conversation and my initial coolness began to dissolve. Soon after, I was accompanying him (and his dog Chelsea) on all-day field trips, and these evolved into weekly 12–14-hour events, always with him driving his Chevette. He asked me to walk in front in case there were snakes so Chelsea wouldn't get bitten. He preferred to go to the sandhills and coastal plain, but he was also willing to go to my favorite areas of granite outcrops, diabase glades, and serpentine barrens. Our conversations had three themes: botany, gossip, and politics. The conversations were long and lively, maybe because I was as argumentative as he was, and he took pleasure in baiting me. I often look back on those days with great pleasure.

If he was in the herbarium, day or night (when he processed the day's collection), Dr. Wilbur was always willing to talk. Perhaps because I was a little older and also because he was not on my doctoral committee and I was never in a class of his, we had more of a friendship rather than student-mentor relationship. In the field, he always helped me learn the plants, where their taxonomic problems lie, how opinions of various experts differed. On any day, one could be exposed to a handful of viable research projects.

Others have described Dr. Wilbur's collecting modus operandi so I will not belabor those observations. He held no phylogenetic biases; weeds were not bad; they were representative of our flora and of their families. He was not impressed with either the quantity of material I collected or with my pressing technique. The copy of his book, *Leguminous Plants of North Carolina* that he gave to me carries the inscription, "Please do not use this book as a plant press." After filling a press (while seated on the ground), and before leaving a site, he would then do another reconnaissance to be sure he didn't miss anything. I chided him about the number of specimens of *Mollugo verticillata* L. that he collected but today I find it hard to pass one without collecting a specimen and appreciating the opportunity to observe our only representative of the Molluginaceae. My feeling for those times is captured by lyrics in one of Bob Dylan's early songs, "I wish, I wish, I wish in vain; That we could sit simply in that room again; Ten thousand dollars at the drop of a hat; I'd give it all gladly if our lives could be like that" (Bob Dylan's Dream 1963).

Mac H. Alford
University of Southern Mississippi

I first met Dr. Wilbur while visiting prospective graduate schools. I had narrowed my list to four universities, and my last visit was to Duke. I had lengthy, fun, and scientifically interesting conversations with Drs. Jonathan Shaw and Paul Manos, with whom I stayed, but I had also wanted to visit the "old" guys, Drs. Donald Stone and Robert Wilbur, the professors who had done the kinds of research that I was more interested in. After meeting with Dr. Stone, I was walked to Dr. Wilbur, then 72 years old, through the herbarium to a corner office with a wooden rocking chair, where I was invited to sit. As I sat down, two large panting dogs entered the room, and one—whom I later came to know as Charlie—came straight for me, sat between my legs, and placed her snout in a precarious location. I nervously petted the dog while hoping that she wasn't about to make me a eunuch. Dr. Wilbur was very much unlike the previous three professors. There was no conversation about the latest scientific findings, what I had done for my undergraduate research, or

what kind of research I wished to do. He apparently didn't notice the dog's location. He got straight to the point: he wanted to know what kind of job I eventually wanted and what I thought that botany had to offer in the big scheme of things. I mentioned my interest in working for a Natural Heritage Program one day, and he rhetorically asked how someone could do such a job without knowing and appreciating the most common of plants. I don't think that he was impressed with my answers, but my answers were probably quite shallow due to the presence of his watchdog.

Ultimately, I decided to attend Duke University and to pursue a Ph.D. in plant systematics. Upon learning this, Dr. Wilbur called me, congratulated me, and asked me if I wanted to collect plants with him just before the fall semester began. If I could arrive a few weeks early, we could travel down to White Oak Plantation in Nassau County, Florida, and I could learn some plant collecting and identification skills. I readily accepted his offer, and the day after moving in, we drove to Florida.

Once again, the conversation turned serious. What did my parents think of North Carolina? Of Duke? Was it too liberal? Why did I like Mississippi? Did I envision a career there? Why not somewhere else? Are you a Christian? Protestant! Why not Catholic? Have you studied Greek and Hebrew and theology? Do you have a girlfriend? You'd better get on it. Do you plan to have children? How many? And on and on. Just as our first conversation was inhibited by the presence of his dog, this conversation was inhibited by fear—fear of his driving. He drove erratically and always seemed to be looking out for plants. As I've heard many times since, "Don't tax [do taxonomy] and drive." I later learned that he had previously been involved in an automobile accident while collecting, and I was not surprised. We stopped for lunch at a Wendy's. I don't remember exactly where (South Carolina?), but there are several specimens of sedges collected there, so there's a record somewhere in the herbarium. He interrupted the drive-through line because he had noticed some nice *Cyperus* growing in the concrete cracks just under the ordering microphone. I was impressed by his passion; the customers in the drive-through line were confused.

When we arrived at White Oak Plantation, the work began. Dr. Wilbur rose early and was ready for breakfast and collecting. We would have collected all day non-stop, but thankfully, the Plantation had a defined time for lunch at the cafeteria, and it was critical that we not miss it, because it was the one "hot meal" of the day. (Our breakfast and supper were merely delivered to the cabin, and we had to heat them up and serve them for ourselves.) Other than the dedicated lunch hour, nothing deterred Dr. Wilbur from collecting. The August heat and humidity were just like in Mississippi—not the kind of weather where one wishes to walk out into semi-open pine savannahs and pull up plants all day. But that's what we did. Dr. Wilbur had a high tolerance for mosquitoes and chiggers that I do not share. He would press plants in a field press, often just sitting directly on the ground or on a little stool while his back was covered in hundreds of mosquitoes alighting on his sweaty shirt. I had little botanical knowledge to contribute, so in pain of merely watching him be devoured, I spent some of my time just shooing the mosquitos off his back.

At dark, the collecting would end, and we would return to the cabin to move plants from the field press into a real press and to record numbers and notes into his collection book. In this I could be helpful, but occasionally he would slow and drop his head. My

admonitions to go to bed and put it off until the next morning were waved away; daylight was the time for collecting plants. Finally, we would bathe, have our supper, and go to sleep, usually around midnight. Well, midnight for me. Dr. Wilbur was reading the newly published *Rising Tide* (Barry 1997) at the time, and he would put in another hour or so of reading before dozing off. The next day, he would ask me about things that he had read, because I, a native of Mississippi, surely knew all the details of the River, the Delta, and Mississippi and Louisiana history. When I didn't, he admonished me to read more. Our conversations during that week are among my greatest memories. Not hindered by the dogs or his driving, we finally connected during those hours at the presses and at our meals.

Upon our return to Duke, I continued to spend time with Dr. Wilbur by serving as his teaching assistant for his Trees and Shrubs of North Carolina course and by working in the herbarium. Although I was the least botanically educated among the new graduate students, Dr. Wilbur appreciated that I arrived early and worked after supper, went to church on Sundays, and was willing to work in the herbarium. I found the work in the herbarium to be relaxing, especially after spending much of the day studying phylogenetic techniques or morphometrics or writing draft grant proposals. Sherri Herndon, the collections manager and his secretary, and Margaret Wilbur, the librarian and Dr. Wilbur's daughter, also provided fun companionship while typing labels, mounting plants, or doing other curatorial duties. After a semester, though, I had still not settled on a project. Dr. Wilbur suggested that I do a floristic project for an M.S., following the advice of a quote that he had on his door: "Experience with plant classification usually begins with acquiring a knowledge of the local flora, and our modern Ph.D. mills neglect that phase of education to a lamentable extent" (Gleason 1931). By doing a floristic treatment, I could get to know the groups of vascular plants better, find groups that I enjoyed working with, become familiar with the taxonomic literature and its authors, and have a smaller project to complete en route to the Ph.D. Because I always wanted to learn the plants of my home state better and because Dr. Wilbur was excited about adding collections from Mississippi to the herbarium, the question was settled, but my broader committee gave me a deadline for the M.S.—two years and no more.

Dr. Wilbur had a negative reputation among the students at Duke: he was critical/skeptical of new techniques, was critical of students' collections and their knowledge of the local flora, and could be argumentative. As I discovered, this reputation was well deserved, but it provided only part of the picture of Dr. Wilbur. His skepticism was critical in my development as a scientist and systematist. He often came into the herbarium and found me and my fellow students trying to identify our collections. He would look at our specimens, critique them ("you need to fill the sheet;" "this paper is not the right size"), and then follow up with a question: "Why recognize this as *Sesbania*? Why not *Daubentonia*?" "Are you sure that Nesom's species of *Gamochaeta* are 'good' species?" He was not necessarily in favor of or against recognizing Nesom's species or classification as *Sesbania* or *Daubentonia*, but every question seemed to dispute our conclusions. At the time, most students considered him argumentative, but I later came to see that he was challenging our understanding and asking us for evidence. This was science at its best.

Personal issues were secondary. For example, when I brought him my collections of *Sabatia*, the genus on which he worked for his dissertation (Wilbur 1955), he was very disappointed that I had misidentified most of them. "Which part of my key did you not understand?" he asked, as we worked through it together. (Identifying species of *Sabatia* is still traumatic for me!) Another time I asked him why his paper on *Asimina* (Wilbur 1970) both praised and criticized the work of Bob Kral, one of the few botanists that he apparently admired, and he simply replied, "It's nothing personal. He was just wrong about some things."

Plant collections were central to Dr. Wilbur's research program. He would insist upon collecting the most common species, just in case they weren't represented in the herbarium. How could we be sure that *Liquidambar styraciflua* (or *Mollugo verticillata* or *Cyperus strigosus*) was in Wake County without a voucher? Although I never collected with him in the tropics, I heard similar stories about him there, where his colleagues would hike into the primeval forest to find poorly known species while he sat near the roadside pressing tropical weeds. Perhaps he had read and taken to heart the message of Gleason: "The visitor finds himself giving all his attention to the trees [of the tropical rainforests], and neglecting almost completely the herbaceous plants along the side of the path" (Gleason 1915: 123).

Not only did Dr. Wilbur teach me about science, but he also taught me about herbarium curation. He insisted that curators should be people who are actively using collections in their research, preferably with a Ph.D. at a research-active university. Otherwise, how would they know what is important to preserve and how best to preserve it? He also insisted upon expert review of the collections. When he would read a paper where someone revised a group of plants and did not ask for a loan of specimens from DUKE, he would craft a letter to the author asking them if they would accept a loan for annotation. He wanted the DUKE collections to be well curated. He taught me how to grow a collection by field work, exchange, and gifts-for-determination. For my floristic project, he expected me to collect duplicates so that we could benefit from exchange and have material to share with experts who helped me with difficult groups (e.g., *Carex*, *Symphyotrichum*). Dr. Wilbur and post-doctoral fellow Gerry Moore even drove to Mississippi to assist me in collecting, although most of the good memories were related to the large portions of bacon provided at the hotel. The fact that a species was rare did not impact Dr. Wilbur's collection technique: upon introducing him to the largest *Schisandra glabra* that I knew, which happened to be in flower, he immediately began to clip away at it to prepare an unhealthy set of thick duplicates.

Although my master's project was focused on the flora of a county in Mississippi (Alford 2001), Dr. Wilbur recognized my interest in alpha taxonomy and encouraged me to take the Tropical Plant Systematics course through the Organization for Tropical Studies (OTS). My office mate, Kyle Williams, and I took the course together, and it was transformative. Although Dr. Wilbur later told me that he expected the course to demonstrate to me the difficulty of working in the tropics, it had the effect that he had originally stated: my passion for working on tropical alpha taxonomy had been ignited, especially for treelet groups with small flowers that most students find boring, such as Rhamnaceae and Flacourtiaceae, the latter becoming the focus of my Ph.D. dissertation (Alford 2005).

The OTS course also introduced me to other faculty and students across the U.S. working on tropical plants, and I decided to pursue my Ph.D. at Cornell University. So my time at Duke ended with the completion of my M.S. One of my committee members lauded my hard work and extensive bibliography, but in typical fashion Dr. Wilbur concluded by reminding everyone that "it was a good start, but there are probably another 200 or 300 species you missed." I have continued to collect there over the past 20 years, and he was correct.

One of our last major activities together was attending the International Botanical Congress (IBC) in St. Louis in 1999. Dr. Wilbur did not want to attend, but Gerry Moore and I convinced him to go, especially for the nomenclature meetings. Dr. Wilbur was not fond of conferences and meetings ("I could be collecting plants or doing something more productive"), but the location in the U.S. and access to the collections of Missouri Botanical Garden won him over. The nomenclature meetings were particularly contentious that year, but Dr. Wilbur met in person many colleagues that he knew previously only from correspondence for the first time (especially from the Committee for Spermatophyta [now part of the Nomenclature Committee for Vascular Plants]). It was joy for me, perhaps the youngest person at that meeting, to meet the greatest names in plant systematics, many of whom I had learned about from my floristic work, in the OTS course, or from Dr. Wilbur, including several other contributors to this issue. After the nomenclature meeting, Dr. Wilbur skipped most of the IBC scientific meeting, especially after the symposium on the PhyloCode, and he spent the rest of the time in the herbarium.

After I finished my dissertation, Dr. Wilbur invited me back to Duke to give a research presentation, my first invited talk. We continued to work together on a nomenclatural paper (rejected four times and eventually abandoned!), and he helped me to build the collection at the University of Southern Mississippi (USMS) with exchange and gifts. He wrote me many letters of recommendation, but most importantly he served as a great role model and helped to develop my skills in science and herbarium curation. I owe much of my own scientific contributions, career development, and mentoring to his training, and I value his fatherly friendship. For those reasons, I was delighted to name one of the most beautiful species of *Neosprucea* after him: *N. wilburiana* (Alford 2008: 52).

Finally, the contribution from me, Kree Cameron, and Richard Carter in this issue follows up on questions Dr. Wilbur gave me about *Gamochaeta* during my master's project. Although Dr. Wilbur was often skeptical of phylogenetic analyses of DNA data, I hoped he would see how those data affirm the hypotheses set forth by Nesom. We are thankful that Dr. Wilbur was a prolific collector of *Gamochaeta*, commonly seen only as a "lawn weed." DUKE certainly has one of the country's largest collections of the genus, which was and is critical in assessing morphological and genetic variation in the genus. In another interesting twist, when I visited the Bishop Museum (BISH) in Honolulu, Hawaii, in 2011, I curated the *Gamochaeta* specimens there and found several new records for the Hawaiian Islands (Alford 2012), one of which was collected by Dr. Robert L. Wilbur just after World War II.

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