Remembering Burt Barnes

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Burt V. Barnes, University of Michigan Arthur F. Thurnau Professor Emeritus of Forestry in the School of Natural Resources and Environment (SNRE) and Forest Botanist at the Matthaei Botanical Gardens, died on July 3, 2014, at the age of 83 in Ann Arbor. He received his Bachelor of Science degree in Forestry in 1952 and his Master of Forestry degree in Forest Ecology and Silviculture in 1953 from the University of Michigan (UM). The following year he graduated from the US Naval School of Music and served as a trombonist in the Army for 2 years. He then returned to the UM where he received his PhD degree in Forest Botany and Ecology in 1959, researching the clonal growth habit of North American aspens. Following graduation, he took a position as a research forester/geneticist with the USDA Forest Service Intermountain Forest and Range Experiment Station in Moscow, Idaho, where he worked on breeding blister-rust-resistant western white pine. He remained there until 1963 when he joined the faculty of what was then the School of Natural Resources at his alma mater. His first year on the job was spent in Stuttgart-Weilimdorf, Germany, as a postdoctoral researcher at the Forest Experiment Station in Baden-Württemberg. It was there that he developed a strong interest in multifactor ecological site classification. He remained on the UM faculty until his official retirement in 2006; he was the Stephen H. Spurr Professor of Forestry, named for his mentor, for the final two decades of his appointment. He was also named Arthur F. Thurnau Professor Emeritus of Forestry, a post he held until the time of his death.

His awards were many. He is the only person to have received both the Barrington Moore Memorial Award for outstanding research in biological science and the Calvin A. Schenck Award for outstanding teaching presented by the Society of American Foresters (he was a member of SAF for more than 50 years). Other awards included being a National Science Foundation Research Scholar for scholarly communications with China. He was one of the first North American forest botanists to visit China in the early 1970s; this led to enduring research and teaching endeavors with students and colleagues in both China and Japan that continued to the very end of his life. Burt’s scholarship, friendship, and influence were far reaching and valued. He was internationally recognized for his expertise, his gracious and generous demeanor, and his willingness to mentor and share. On a regional level, he received the Outstanding Teaching Award presented by the USDA National Association of State Universities and Land-Grant Colleges. On a state level, the Sierra Club established the Burton V. Barnes Award for Outstanding Academic Contributions in Support of Michigan’s Environment, and Burt was its first recipient. The Council for Advancement and Support of Education awarded him Michigan Professor of the Year honors. At UM, he received the Students for SNRE Outstanding Teaching Award on three different occasions and the Golden Apple Award in recognition of excellence in university teaching as determined by the students. His contributions to SNRE were immeasurable. One of his colleagues there remarked that “he took SNRE’s core values of forestry and conservation into a very new period of history that focused on ecological analyses and new, more integral, interdisciplinary, and nuanced natural resource and environmental management and preservation.”

During his time on the faculty at UM, he mentored 19 doctoral students and 75 masters students and “fathered” three generations of academicians, research scientists, and practicing professionals. His two undergraduate courses in Woody Plants and Forest Ecology were taken by more than 6,000 students, and his undergraduate textbook in Forest Ecology (now in its fourth edition) touched countless other students and practicing professionals in North America and beyond. His book on Michigan Trees is undoubtedly one of the finest treatments of the natural history of trees on a state level and is soon to be complemented by his treatment of Michigan Shrubs, now in the hands of the publisher.

Burt’s research thrust was hard to define, given its breadth. As one of his former students remarked,

"there are few individuals who were so knowledgeable of the connections between the life histories of plants and the properties of ecosystems. Any considerations of individual species’ life histories were always put in the context of ecosystems up through the regional level. In this regard, he was very fond of telling others through repeating several lines in The Music Man that ‘ya gotta know the territory’"
Regionalization was very important to him, and he and his students spent a lot of time on the theory and application of describing and mapping landscape ecosystems. Indeed, some have argued that his efforts provided the intellectual foundation for the landscape-based system by which the USDA Forest Service manages its lands. At the same time, his students and he contributed immensely to our understanding of the life histories and ecological genetics of birches, aspens, and maples, but again, in a landscape context. His groundbreaking doctoral research on the clonal growth of aspens is still highly regarded, and he was one of the few forest ecologists in recent decades to have discovered and characterized a new tree species in North America, the Murray birch (*Betula murrayana*), named after long-term SNRE forest manager, Frank Murray.

Although Burt’s accomplishments as summarized above are indeed important, it was Burt the person who really needs to be celebrated. I recently received remembrances of him from three dozen former students and colleagues, and although each story is unique, there are clearly some common threads that run through them, which I will relate here. As his first doctoral student, I saw in him the same qualities that students in recent years saw. First and foremost, Burt was a premiere teacher and it showed in his students as his colleagues, which resulted in friendships that endured for life. As one student put it, “he was intelligent, yet funny, charismatic, clear, efficient, and fair.” Several of his students referred to him as their mentor and their role model as a “teacher, scholar, and engaged public servant.” He exuded an incredible love of, deep interest in, and tremendous enthusiasm for the natural world, and his powers of observation of nature were second to none—underpinned by his unequalled attention to detail. As one of his students put it, he had the “exceptional quality of being able to inspire and teach the observational and conceptual skills of a scientist and at the same time to convey a love of and awe for the living world.” Or as another put it, “he had a passion for more fully and holistically understanding the natural environment to steward it in much more sustainable ways.” Another observed, “he single-handedly changed the way so many people looked at the world.” One graduate student who had a mentor other than Burt stated that “one class with him influenced the rest of my life.”

Burt was also dedicated to good scholarship (including critical thinking) and demanded it of his students, but in a way that made it enjoyable. As one student noted, “he created an environment conducive to learning—demanding a high level of mastery and detail, but not afraid to let students have fun along the way.” Some have argued that his abundant good-natured humor was designed to create a sense of community and camaraderie in the pursuit of knowledge. As one of his students noted, he “jumped into elaborate skits, schemes, and jokes,” was designed to create a sense of community and camaraderie in the pursuit of knowledge. As one of his students noted, he “jumped into the fray, ate mud, provided apples for long field trips, and made jokes.” In many ways, he treated those of us who were his graduate students as his colleagues, which resulted in a feeling of mutual respect. As one student related, he had a “fundamental respect for the intelligence and good judgment of his students.” This was all the more remarkable given that he did not tend to select new students purely on their prior knowledge of forest ecology or aptitude for learning based on standard indices, but more so on their enthusiasm for learning the subject matter and their strong work ethic. Given these qualities, he would not uncommonly spend long hours with students in advising them on their research projects and critiquing their results.

The mutual respect that developed between Burt and his graduate students resulted in friendships that endured for life. He was a tireless and prolific communicator and often reached out to his former students without their prompting via postcards, hand-written notes, e-mails, phone calls, and personal visits. This tireless communication extended to colleagues as well, one noting that the e-mail responses received from Burt were invariably longer than the original messages to him.

In closing, I would be remiss not to mention that Burt believed that nothing transcended nature, that it represented ultimate reality. It was his religion in a sense. Accordingly, he would often quote his friend and fellow ecologist Stan Rowe, who stated in his fine book, *Home Place: Essays on Ecology* (1990), “A greater than human reality would then revolve around the Earth, recognized as the source of creativity, life and health.” To which Burt might respond with “too much!” and close with “Later, BVB.”