FOUR STUDENTS REMEMBER THEIR MENTOR DR. DONALD J. PINKAVA AUGUST 29, 1933–JULY 25, 2017

A little over a year ago we lost our colleague and friend, Don Pinkava. We all have good memories of our time together. Don was a passionate scientist, editor, collector of plants (and many other things), and a generously supportive colleague. One of his most significant contributions has been his mentoring of students. The following accounts have been written by four of his students, David Keil, Wendy Hodgson, Marc Baker, and Dixie Damrel. They span his long teaching career at Arizona State University and provide a little insight into life at the Arizona State University Herbarium over the years. These are only a few of the many students and colleagues that were influenced by Don's gentle mentoring.

DAVID J. KEIL

As a sophomore at ASU in 1966 I enrolled in Arizona Flora, a class taught by a young botany professor named Don Pinkava. It was an oddly structured class with only one lecture per week but lots of lab time, plus some field trips. Dr. Pinkava introduced us to some basic botanical terminology and then took the class out on campus to learn keying skills by keying out campus trees. I quickly caught on, as I already knew how to use a key, and my high-school Latin helped me to learn the terms. When Dr. Pinkava introduced us in lab to flowers, he could tell that I was interested. In our first keying lab he introduced Kearney & Peebles's Arizona Flora. That day I discovered the fun of solving botanical puzzles.

In subsequent labs Dr. Pinkava introduced the herbarium and taught us how to use a plant press. I was hooked. I began collecting plants on class trips and bicycled into the desert to collect on my own. Dr. Pinkava encouraged me as my interest deepened, and he and Elinor Lehto, Curator of the ASU herbarium, invited me to go on a field trip with them to Lake Pleasant Regional Park. On April 6, 1966 a ranger took us in a motorboat to an isolated area where we spent hours hiking about, discovering, collecting, learning, and enjoying each other's company. Thus began shared field adventures that lasted for years. By the semester's end I was becoming a taxonomist, and I asked Dr. Pinkava to be my advisor.

That summer I returned to my parents' home in the Chicago area, purchased a copy of the Illinois Flora, made my own plant press, and proceeded to collect and learn the plants I'd grown up with. I discovered that the skills and knowledge of plant families I'd acquired in Arizona were transferable. I returned to ASU that fall with boxes of plants. Dr. Pinkava and Elinor helped me with the botanical challenges, pointed me to references that I could use, and gave me access to the herbarium. And a work-study job as an herbarium assistant!

In spring 1967 the desert exploded in bloom. I took a collecting trip on my own along the Apache Trail, brought back bags of plants, and Dr. Pinkava, Elinor, and I spent much of the following week processing my gatherings, which included several plants not represented in the ASU herbarium. Dr. Pinkava invited me along on the Arizona Flora class trips, and to my great surprise, he divided the class into three groups. He took one group of students, Elinor led a second group, and he assigned a third group to me. It was a huge vote of confidence for me from my mentor.

In 1967 Dr. Pinkava received a grant to support research on the Arizona Flora and to increase the holdings of the herbarium. He and Elinor and I would pile into his Mustang and head out to some remote area of the state where we tried to collect every plant we encountered. We collected all day, and if it was an overnighter, pressed plants by lantern light, sometimes until midnight or later. The banter in the car, in the field, around the picnic table, and later in the herbarium was that of friends and of a mentor guiding his students. Dr. Pinkava was strict on some aspects of our relationship—if we stopped for a restaurant meal, he *always* picked up the tab.

I took several classes from Dr. Pinkava, and enjoyed them all. I learned much from what he taught, *and* from how he taught. He respected his students. He listened. He encouraged. It was clear from his classes and from the time he spent outside class preparing that he invested himself in his students. When I served as his lab assistant, he guided me. Sometimes it involved letting me make mistakes, and then helping me to learn through them. He knew when to let me take the initiative and when to reel me in. Dr. Pinkava was my role model as a teacher.

I graduated in 1968 and continued on for a master's degree. Right after graduation Dr. Pinkava, Elinor, and I traveled to Cuatro Cienegas, in Coahuila, Mexico, where he was investigating the flora. The trip over was eventful, with a car breakdown in New Mexico, the most spectacular thunderstorms I've ever experienced, and our arrival punctuated by a pounding hailstorm. What followed was a time of exploration, my first experience in another culture, exposure to a new flora, a backpack climb into a desert mountain range, and wonderful memories. Dr. Pinkava was always true to his Catholic faith; even in this remote area of Mexico, he sought out the local church and attended Sunday mass.

My master's degree project was a study of the vegetation and flora of the White Tank Mountains. Dr. Pinkava took on a new mentoring role for me as I attempted to write my thesis. Time after time he chopped, questioned, edited, and rewrote, as he helped me to transform my raw prose into something that I could be proud of. I have no idea how much time he poured into my writing, but I am forever grateful to him. I am a far better writer and editor because of his critical editorial attention.

I completed my master's in 1970 and entered the U.S. Army as a second lieutenant. My plans for further education were on hold as I looked at two years of active duty, including a likely stint in Viet Nam. Six weeks into my officer training my cohort of young officers was offered an early exit—the Army had discovered they had too many junior officers. That night I called Dr. Pinkava

with the news and asked for advice on applying to a Ph.D. program. He came up with several suggestions, and soon I was admitted to Ohio State.

Because of Dr. Pinkava's tutelage I was well prepared to start my research. He had taught me how to dig into literature and how to write good scientific prose. I jumped into my research. Soon after arriving at Ohio State I wrote a grant proposal that led to NSF support, and by summer 1971 to an extensive field trip in Mexico, accompanied in the first half by Lyle McGill, another of Dr. Pinkava's protégés. Thanks to my preparation under Dr. Pinkava, I had field and lab skills that I was ready to use.

I received my Ph.D. in June of 1973. Over the next two years this was followed by a succession of short-term teaching and research positions, none of which led to permanent employment. In August 1975, without a job and in the hope of getting leads on employment opportunities, I attended the AIBS (American Institute of Biological Sciences) national meeting at Oregon State. There I ran into Malcolm McLeod, another of Dr. Pinkava's former grad students. Malcolm had a teaching position at California Polytechnic State University. We reminisced about times at ASU, and when Malcolm learned I was looking for a job, he suggested that I stop for a visit—there might be an opening at Cal Poly. I did visit, but no job materialized then. I continued on to Phoenix, where my parents now lived.

I drove over to ASU and visited Dr. Pinkava. We compared notes. He was trying to get a promotion to Professor. I needed a job. We both reckoned that research publications would enhance our chances of achieving those goals. So Dr. Pinkava made space for me in his lab, and we undertook research projects that led to a series of papers. It was a productive year, with personal and professional growth, and I experienced Dr. Pinkava's mentorship at a new level. In the end he was promoted, and I got my job. Malcolm let me know that a position had opened up at Cal Poly, and I began my 40+ year career there.

Over the years I made frequent visits to ASU. I'm not sure just when he became Don to me and not Dr. Pinkava—we were colleagues for many years. I spent a sabbatical at ASU in 1989. I always felt comfortable when we talked. He was a humble man, a good man, and a true gentleman. My visits became less frequent after my kids came along, but Don was always in my heart. The party for Don's 80th birthday was the last time I saw him. I am honored to have had him as my mentor, colleague, and friend.

David J. Keil. Ph.D.
Professor Emeritus
Biological Sciences Department
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WENDY HODGSON

Dear Dr. Pinkava,

I remember the day we first met, back in the spring of 1972—over 45 years ago. You were wearing that tan dress jacket, the only one that I think you had until you met Mary. That Arizona Flora class changed my life. Your enthusiasm and passion was infectious—I spent 4 days a week in your lab trying to key out those plants. I loved our field trips, all of us frantically writing down scientific names as you effortlessly announced them to us eager beavers. I, and others I am sure, wondered if some day we too, could ever spout them off like that! That B was the best, most hard-earned B I ever got! I still wanted to study animals, but your encouragement and desire to provide me with numerous opportunities to draw plants altered my direction of career choice. I got my wildlife degree at a time when women were not encouraged—actually, women were discouraged to enter that field. I knew I did not want to pursue this field. You encouraged me to pursue botanical illustration and botany in your humorous, non-suspecting but effective manner (and all this coming from someone who was a fine illustrator himself!), sending me on a life course for which I will be forever grateful. I loved drawing plants for you and your students—what an honor for me, especially those plants named in your honor (that *Phacelia* will always be my most favorite). Stashing my wildlife degree in a drawer, I excitedly pursued botany under your leadership and mentorship. You provided me the idea of what I might want to do for a thesis—edible plants of the Sonoran Desert, which would include illustrations (and which got me on the path of ethnobotany). During this period, I remember our Garden field trips we took as part of your Arizona Cactus seminar, my old, worn out Benson's Arizona Cacti book in hand. Who knew we and other friends/colleagues you mentored would produce together the beautiful Cactaceae treatment for Intermountain Flora 38 years later? It was project that we would never have been asked to do had it not been for your expertise. Those of us, who were a part of this project, including our illustrious illustrators, will always remember it as the most satisfying and fun project ever worked on. With this under our belt, we started on what seemed a natural transition, updating the Cactaceae of Arizona project, with you leading several of us DBG researchers and outside collaborators. Unbeknownst to you, we had planned to dedicate it in your honor; we will do so as well as dedicate it to you in your memory.

You affected so many people in such a wonderfully positive way, with students following their love of science while developing long-term friendships spanning several decades. How can we forget those fun-filled Christmas gatherings when you, Mary and little Michelle opened your homes to us, celebrating life and good friends, providing opportunities for each of us to express our thoughts, gratefulness and fun stories only eccentric botanists can tell? You always unselfishly shared your ideas, thoughts, and opinions about cacti, agaves, and life, while also listening openly and gamely to our own. All of

us revered your genuine graciousness and respect, as was your love of family and friends.

Every plant we collect, study, describe as new to science, and share with friends/colleagues, will be done so in the spirit of you, gently prodding us on to become better botanists, better persons. Thank you, we love you, Wendy.

Wendy Hodgson Herbarium Curator Desert Botanical Garden

MARC BAKER

In 1980, I wrote to researchers at several graduate schools in search of a potential major professor. After reviewing my research interests, I was pointed to Dr. Donald Pinkava at ASU as the expert on the Opuntioideae. I wrote to Dr. Pinkava, set up an appointment, and took a bus to Tempe. I did not drive because I was planning to hike around the Sierra Madre Occidental after the interview. I recall the interview very well because I was simply astounded by Dr. Pinkava's intellect. Until that time I was perhaps somewhat full of myself because I had done well on my Biology GREs. The interview with Dr. Pinkava was very humbling, to say the least. At the same time, however, it inspired me to put my nose to the grindstone and learn all I could from this master. Although he was somewhat concerned about my solo hike in the Sierra Madres, he accepted my application, and I started that fall at ASU.

Upon arriving at ASU, I parked my VW bus in an empty field and started classes. After learning of my living arrangement, Dr. Pinkava, in his fatherly manner, demanded that I find more permanent quarters. Throughout my three years as a Ph.D. student, Dr. Pinkava provided wise advice. For example, he suggested I not bother with DNA studies because they were too much trouble for too little data, especially at the population level. He was correct, of course, and only after 30 years have DNA methodologies been developed that provide plenty of data for the dollar. Of course, someone had to develop those methods, but it was not my aim to do so.

Dr. Pinkava's knowledge of the Opuntioideae, as well as other cacti and the flora of Arizona, was immense. This was not only because he was smart but also because he was diligent. Early every morning, he was reading, organizing, and requesting reprints. He was also assiduous with his teaching and, although he demanded much from his students, he was loved by them. After graduating from ASU and taking several detours, I have spent much of the intervening 30 years interacting with Dr. Pinkava, all of which has been positive and academically exciting. With every discovery in the field, no matter how small, it was Dr. Pinkava whom I would call, and I can still hear his gentle voice of

encouragement. He was my academic father, as well as for many successful students. He was one of those rare individuals who lived a virtuous, productive, and exemplary life.

Marc Baker Consulting Botanist Adjunct Professor Arizona State University

DIXIE Z. DAMREL

I came to know Dr. Pinkava in his later teaching career and unexpectedly ended up being one of his last graduate students. I'd first returned to university life after a separate and unrelated career, thinking that I wanted to study horticulture. But all it took was time volunteering in the Herbarium—and a semester of Dr. Pinkava's legendary Plant Taxonomy class—to put me on an entirely different path.

It was as an ASU herbarium volunteer, gluing labels on genus covers in the Cactaceae collection (and coming to accept the natural infusion of glochids secondary to the work) that I briefly first met Dr. Pinkava. He was a quiet background presence and ever busy professor who would regularly spirit into the cactus collection mentoring other botanists and was always, always reviewing specimens.

Other students spoke in reverential tones about Dr. Pinkava and insisted that if you hadn't taken the Pinkava Plant Tax class, then you really hadn't taken the ultimate journey! For so many, this course was an eye-opening rite of passage where you learned to really *see* a plant instead of simply look at it. Dr. Pinkava's lectures were amazing revelations delivered in his calm, direct and demanding manner. He taught labs by the "old school" method, with students drawing, coloring, labeling, dissecting; struggling to relate the terminology to the actual structure under the scope, and wondering how many terms for hair-like "trichomes" a person needed to know. The convoluted couplets of the dichotomous key were lessons in humility. Yet, Dr. Pinkava conducted the class like a patient Old World Santa Claus. He would bring wonderful gifts but the recipient would have to practice and work hard to identify every feature of each gift. By the end of the course, recognizing the features of a plant became an unconscious reflex. Indeed, it became hard to remember that there was a time when one looked at a plant and did not actually "see" it.

As a graduate student I had the life-changing opportunity to work with Dr. Pinkava as a research assistant on "The Phoenix Flora," a project that reviewed herbarium specimens at Arizona State (ASU) and at the Desert Botanical Garden (DES). Working side by side, Dr. Pinkava and I went through all of the Arizona specimens in both herbaria. What a privilege to receive an extraordinary and personalized tour of Arizona flora, conducted by a patient master who treated me (as he did all his graduate students) as a genuine colleague. As Dr. Pinkava

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would discuss the specimens and taxa, I tried to imprint each one in my mind and memorize his comments about the plants and his stories—true botany lore—about collecting and collectors. When we came across a specimen with an identification I thought questionable, he encouraged me to speak up about it, no matter who had collected it. Correct data were important to him. When he noticed that one portion of the Phoenix region was under-collected, the area southeast of Phoenix, he encouraged me to do a floristic study of the San Tan Mountains Regional Park to remedy that situation.

One of the great treasures of this wonderful time in the herbarium was seeing the kindness and camaraderie that Dr. Pinkava offered his students. We broke for lunch every day at Dr. Pinkava's insistence, and in this informal setting he gave us a sense of belonging and confidence, and encouraged (some might say challenged) us to find our voices as professional botanists. His delight in being a botanist was contagious, as were his enthusiasm and charming, sly sense of humor. I think these were very important gifts. One could see his joy whenever one of his students came in with a press full of plants. Although he had been a botanist for many, many years, Dr. Pinkava was always happy and eager to sit down with the student to see what was in the press—for him, it was like opening a treasure chest. His enthusiasm made his students feel that their work was genuinely important, and his high standards made them feel prepared and inspired to undertake meaningful lives in botany.

Dixie Z. Damrel Curator Clemson University Herbarium

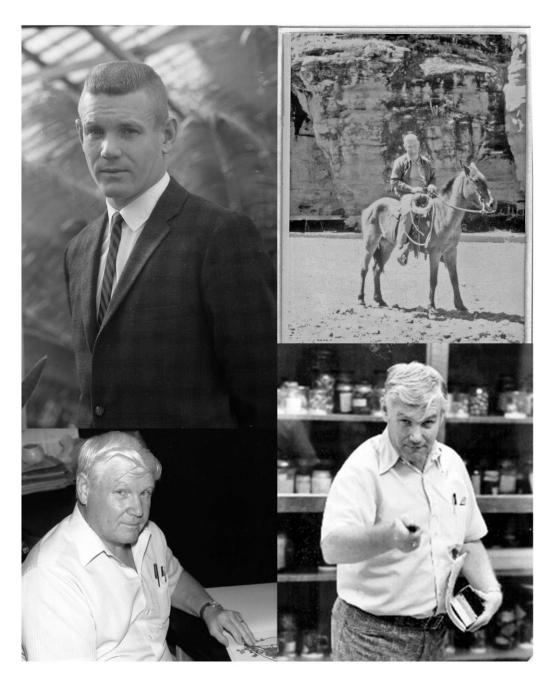


Figure 1. Photos of Don Pinkava over the years. Clockwise from upper left. Probably as a student at Ohio State University mid 1950s to mid 1960s. Don on fieldtrip to Mexico in late 1960s or early 1970s. Professor Pinkava 1980s. Don near retirement 1990s.

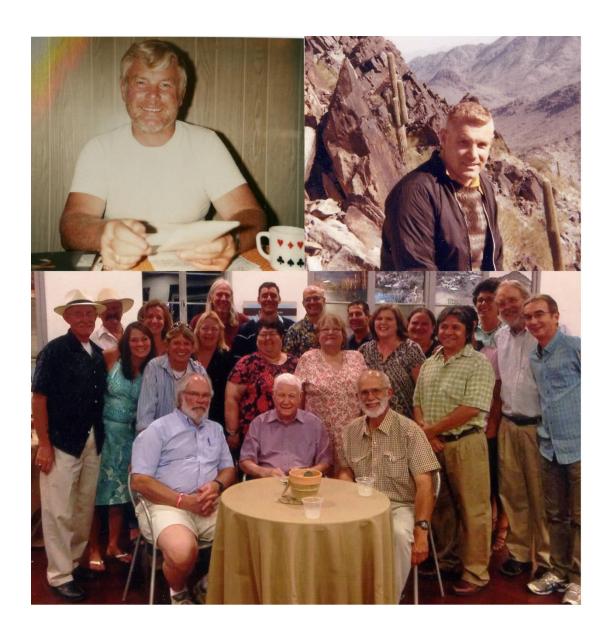


Figure 2. Photos of Don Pinkava over the years. Clockwise from upper left. Just home from trip to Mexico (with a beard) in about 1977. On a family trip in about 1974. At 80th birthday celebration. Front row: Tim Reeves, Don Pinkava, David Keil. Middle row: Liz Slawson, Wendy Hodgson, Kathy Rice, Cindy Zisner, Linda Reeves, Raul Puente. Back row: John Anderson, Lyle McGill, Steffi Ekert Bond, Marc Baker, Jon Rebman, Andrew Salywon, Greg Imdorf, Shannon Doan, Kathleen Pigg, Liz Makings, Les Landrum, Marty Wojciechowski.