



Brian Bowen

Tennessee Natural Areas Program: 50 Years in the Making – Reflections from Brian Bowen

A Conversation with Brian Bowen, former Tennessee Natural Areas Program Administrator, Tennessee Department of Environment and Conservation (1994 – 2018) as he reflects upon the last 25 years of the program.

Moira McGinty Klos: What inspired your interest in the land?

Brian Bowen: When it comes to conservation and state programs, George Fell was an important influence, especially his early work in establishing the Natural Lands Institute as well as his role in the forming of The Nature Conservancy. So much of that early work occurred in Rockford, Illinois, and I grew up in Freeport, which is only about 20 miles away. I cannot say I noticed what was going on when I was growing up, but I came to appreciate this work much later when I entered the natural areas professional ranks.

I came to this career by a circuitous route and was a late bloomer. I worked in several different fields after high school, traveled, took courses; but it was not until my mid-thirties when I was working and raising a family that I pursued my bachelor's and then my master's in biology. During my last year of graduate school, I was able to work part-time at Radnor Lake State Natural Area and at the Warner Park's Nature Center, which is a large urban Nashville park. I was mostly doing environmental education and resource management. I was hired in 1989 full-time at the Warner Parks as a naturalist. I felt truly fortunate to get that opportunity at that time in my life.

Then in January 1994, I was hired by then Director Reggie Reeves to work for the Tennessee Department of Environment and Conservation (TDEC) in the Division of Ecological Services, now the Division of Natural Areas (DNA), where the focus was on conserving land and protecting rare and endangered species. It was challenging learning about natural area programs while working towards developing one. Being a member of the Natural Areas Association (NAA) was extremely helpful in that regard.

Circling back to influences, reading Aldo Leopold and E.O Wilson, the latter, who I once met and had a conversation with, also inspired me in my natural areas career. On a personal note, I was fortunate to know Dr. Elsie Quarterman through my work in the

Natural Areas Newsletter

June 2021



Natural Areas Program. She was awarded NAA's George Fell Lifetime Achievement Award in 2008. There were many other prominent ecologists in Tennessee that I became friends with during my time in the Natural Areas Program who influenced my career.

Moira McGinty Klos: Describe how your work developed in the Natural Areas Program.

Brian Bowen: When I was hired, there was not much stewardship activity occurring in the state natural areas at that time. The Tennessee Natural Areas Preservation Act was passed in 1971, and for the first 10 years or so, oversight was mostly through various conservation planners within the Department with little or no management occurring. By the 1980s, oversight was given to the Division of Ecological Services where the foundation for a program was being created. Larry Smith, who was a former NAA board member, worked in the Division at that time and helped to advance management activities and designations; however, there was not yet a Natural Areas Program.

I was hired to develop the Program. I was the first person to have the working title of "Natural Areas Administrator," a position referenced in the Natural Areas Preservation Act. The Program got jumped started when Director Reeves and I decided to utilize the 25th anniversary to create an event to raise awareness about natural areas in Tennessee.

Moira McGinty Klos: You were the administrator during the 25th Anniversary of the Tennessee Natural Areas Preservation Act. Would you reflect on that anniversary and how things changed between then and now as Tennessee celebrates the 50th?

Brian Bowen: Yes, the anniversary celebration was a good way to bring attention to our efforts to build the Program and raise awareness about protecting state natural areas in Tennessee. The 25th anniversary was in 1996, and that spring we convened a one-day anniversary event attended by the governor's staff, members of a newly formed natural areas advisory committee, directors of land trusts, directors of state and federal agencies, friends' groups and nonprofit organizations, and the general public.

I thought it was important to have the Natural Areas Association involved and coordinated with NAA to have a plaque made recognizing the event. Ralph Jordan, who worked for TVA and was NAA's president, gave a presentation about the importance of protecting natural areas in Tennessee and presented the plaque that recognized 25 years of natural areas protection in Tennessee to a member of the governor's staff. I followed Ralph's presentation and gave a presentation on the Natural Areas Program and its goals.

There was a 25th anniversary natural areas commemorative poster unveiled at the event, and I had worked with the editor of the Tennessee Conservationist magazine on

Natural Areas Newsletter

June 2021



the layout and text for the spring issue that was largely dedicated to the 25th Anniversary. Both posters and magazines were distributed there and at future events.

A new poster was published for the 30th, 35th and 40th anniversaries. I worked with some of the best nature photographers in the state for each new poster and coordinated with the Tennessee Conservationist to feature the Program each anniversary. We hosted a one-day celebration event like the 25th every 5th year through the 40th to continue our efforts to raise awareness.

The 25th anniversary event helped launch the Program. Each subsequent event including the 50th has continued to increase our visibility as an important state program both in Tennessee and nationally. That recognition did not exist prior to the 25th anniversary.

I'm pleased with the growth of the Program since the 25th anniversary. The Program has significantly expanded the number of state natural areas and acreage, established protocols for designating new natural areas and hired field office positions to implement management, provide public access and interruptive programming. We have developed better funding sources and solidified important partnerships with state and federal agencies and non-profit organizations to help us accomplish our mission.

Moira McGinty Klos: What are some of your accomplishments during the 24 years you administered the program? Did your focus change over the years?

Brian Bowen: In the early days there were growing pains, and we were still establishing a structure. I and others were concerned about the lack of process for designating natural areas. There had been a flurry of early designations between 1973 – 75 with more than a few of the designations on private lands. This was a problem because the State did not have an interest in these private lands that are protected in perpetuity.

It also seemed like the first few rounds of natural area designations and some later, derived from a wish list of best places that were known to have scenic, recreational, or ecological values. In many cases those values seemed subjective and arbitrary.

After I started in the position, the policy changed to designate only private lands that the State would have an interest in through conservation easements, allowing us to enforce the Act, if needed, and assured us that those lands would be managed as natural areas. This applied to land's owned by land trusts and conservation organizations too. The majority of the designated natural areas are public lands owned by the State, and mostly owned by TDEC.

This change ultimately resulted in the de-designation of three previously designated private lands. Both Roger McCoy, DNA Director, and I, were reluctant to de-designate because of the precedent it set; but we decided it was necessary to protect the integrity of the Program.

Natural Areas Newsletter

June 2021



I worked with the Natural Heritage Program (NHP) to address the second concern. NHP is a sister program in the Division of Natural Areas, and we work closely together to identify new natural areas. We established criteria for designation based on NatureServe's Global Ranking System using a science-based approach. Sometimes an exception was made because the Act allows for Class I Scenic-Recreational Natural Areas. We highly prioritized designating Class II Natural-Scientific Natural Areas.

Both programmatic changes, designating only private lands with conservation easements, and establishing a science-based method for evaluating natural areas for designation, were critical improvements to the Program, and I was glad we (the Division) were able to get it done while I was there.

I am also proud that we were able to expand the number of natural areas and acreage. When I was hired, there were 38 designated natural areas protecting about 55,000 acres. Presently there are 84 designated natural areas protecting about 130,000 acres, a significant improvement. This was accomplished collaboratively with our partners, the Natural Heritage Program, and the Division Director who oversees the acquisition process.

There were many improvements during my time working in the Program in how we manage natural areas. There was a backlog of incomplete management plans or plans that hadn't been written that were completed during this time. The Division was able to establish an interactive management database that tracked sight visits, management activities and improvements or incidents (violations), documenting all activities. This includes trail and kiosk development which occurs in natural areas that are suitable for public access.

Creating a website narrative for each natural area for the public was one of the first big projects I tackled when I started. Once I was able to hire staff, they began doing interpretive programming as a part of their job function. There is an annual events calendar posted on our website and a Natural Areas Week celebration that occurs each spring with events statewide.

There were landmark events I greatly appreciated being involved with while I was Natural Areas Administrator. Surrounding Nashville in Middle Tennessee is the Middle Tennessee Cedar Glade and Barrens Complex which is a NatureServe G-I ecosystem. When I first started, the Tennessee Office of TNC and our Division prioritized acquiring the best of these cedar glades and barrens, an ecosystem that supports more than twenty endemics and at the time, three federally endangered plant species.

In my opinion, we've been highly successful protecting Middle Tennessee Cedar Glades and Barrens considering the explosive population growth here. In 2011, this resulted in the U.S Fish and Wildlife Service (USFWS) delisting the federally endangered Tennessee coneflower (*Echinacea tennesseensis*). This was accomplished by protecting all five extent populations in 10 designated state natural areas, and through

Natural Areas Newsletter

June 2021



our management efforts, their populations significantly increased since monitoring began.

This history is documented in a paper published in the October 2011 Natural Areas Journal that I wrote. The delisting of a species from the Endangered Species Act was a big event for the Program, delisting rarely happens and when it does, it is huge conservation success story. I was happy that Dr. Quarterman, who was almost 101 years old, attended the ceremony and was honored. She was considered the pioneer of cedar glade ecology and was one the first to rediscovery Tennessee coneflower in 1968 when it was believed to be extinct.

I am proud of the work that was accomplished managing the Cedar Glades and Barrens especially the last few years before I retired. Through the State Parks Iris License Plate Fund, I was able to obtain significant funding to remove vast areas of red cedar tree thickets that thwarted prescribed burning. There were many properties the Program acquired with pristine cedar glades but often the barrens had been left fallow and were invaded by cedars. With this effort, barrens and, in some cases, rare species were restored to the barrens especially with the reintroduction of prescribed burning.

At this time, I had been charged to develop a management needs assessment for the Cedar Glades and Barrens. Once the assessment was completed USFWS provided significant funding for us to contract with the Natchez Trace Fire Team of the National Park Service (NPS) to do widescale prescribed burning over the next three to four years in the Cedar Glades and Barrens. We are able to burn bigger areas in much larger burn units, including areas that had not previously been burned. Eliminating eastern red cedar tree thickets allowed us to develop large burn units. Using the gyro-track allowed us to put in fire lines around the perimeter of all these properties.

Working with NPS to conduct prescribed burns had another upside. It trained our staff to take on much more prescribed burning in-house. Roger McCoy told me that the Program burned a couple thousand acres last year during Covid which is a lot of land for our small program. So much of what we accomplished in the cedar glades, including acquisition, was only possible because of USFWS funding.

Moira McGinty Klos: Tell me about your work related to invasive species.

Brian Bowen: Managing and controlling invasive species was a major focus of my job at the start of my career at the Warner Parks. I started a volunteer removal program there and developed a strategic plan for invasive species management in the 3,000-acre Metro Park. I did workshops and presentations on the threat of invasive species and was a representative for the Tennessee Recreation and Parks Association (TRPA) in talks with the Tennessee Nurseryman's Association about the issue. I developed an invasive species brochure listing the worst invasives in Tennessee which

Natural Areas Newsletter

June 2021



TRPA distributed statewide. I was honored when TRPA awarded me their "Award for Excellence in Resource Management" in 1993.

During my transition to TDEC, Sandy Bivens, who was Director of Warner Parks Nature Center and I developed a "Landscaping with Native Plants for Middle Tennessee" brochure which received a national award from the Association of Zoological Horticulture. The brochure was designed to be adaptive and could be replicated by recommending the native plants for a region. Everyone wanted to know what they could plant that was native. During my first couple years at DNA, myself and staff completed brochures for East and West Tennessee. It was a popular brochure and was replicated in other states for their regions.

In the mid -90s, my interest in this issue led to my collaboration with others statewide to establish the Tennessee Exotic Pest Plant Council. I became its first president in 1994, and then over the next two years, I collaborated with others to establish the Southeast Exotic Pest Plant Council and the National Association of Exotic Pest Plant Councils. The latter was originally comprised of Florida, California, Washington, and Tennessee EPPCs in 1996. Today there are five regional organizations, comprised of 23 states, and four individual state affiliates. Many have dropped the EPPC name and are now called Invasive Plant Councils.

I was fortunate to have the flexibility to work with these non-profits while I was the Natural Areas Administrator. I served as liaison between the Councils and NAA and helped foster the Council's participation at many NAA conferences. On another front, I was able to work with a committee convened by the Tennessee Department of Agriculture to evaluate invasive species that were available in Tennessee. This resulted in prohibiting the sale of about a dozen invasive species.

For the Natural Areas Program, invasives remain one of our biggest threats. The threat is identified in our management plans and a strategy is implemented to manage them. Fortunately, most of our state natural areas are some of the least impacted and most pristine lands in the state, but regardless, the problem is still costly, overwhelming to address and managing them is extremely difficult.

Moira McGinty Klos: Earlier in our conversation you mentioned the Natural Areas Association. Would you tell me about the role NAA played in your career?

Brian Bowen: My first Natural Areas Conference (NAC) was in 1989 in Knoxville, TN. Ralph Jordan was the one who put it on, and I had never been to an event like the NAC. It made a lasting impression and got me involved with NAA. I gave my first presentation in 1993 at the NAC in Maine. Since then, I have given other presentations and organized sessions. In fact, I was the chair of the NAA conference committee for several years when I was a NAA board member. I became a board member in the late 1990s

Natural Areas Newsletter

June 2021



and was on the board for a majority of years when I was the Natural Areas Administrator.

My participation in NAA was one of the most rewarding experiences of my career. I met likeminded people, and many professionals overseeing state natural areas programs. I greatly valued the chance to visit other states and experience their natural areas and see how they managed them. It was an invaluable experience to learn from others especially at the NAC which was always held in the best places you would ever want to visit.

Perhaps the biggest impact NAA played in my career was when I served as conference chair when TDEC hosted the 25th NAC in Nashville. It was an important event for the Program, the Commissioner of TDEC put up 10K in seed money, and mobilized state park rangers to lead field trips and assist with other NAC resource needs. It was a pivotal event for the Program because it solidified our collaboration with State Parks and other state agencies who helped with the conference. State Parks manages many TDEC designated state natural areas with the Division's assistance.

The conference was hugely successful in the quality of its program, field trips, and venues. The plenary session was at the historic War Memorial Auditorium and the banquet was at the Ryman Auditorium. There was plenty of music provided throughout the conference, after all it was in Nashville. The conference was downtown and honkytonks on lower Broadway were open to 3 a.m. A good time was had by all, and a most importantly it was a superb conference, sharing information, with great presentations and opportunities for professional interactions.

In closing I just want to say that NAA plays a pivotal role in connecting land managers and those in the conservation profession. Attending that conference in 1989 helped me make so many professional connections early in my career that benefitted me during all 24 years. I strongly encourage all people entering the profession to join NAA and attend the annual NAC.