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A legend of prairie restoration looks back and diagnoses his "prairie fever"

By Mari Coyne

"I grew up in Bridgeport, a block and a half from the Daleys," says Dr. Bob Betz, professor emeritus of Northeastern Illinois University. He leans back in his spring-loaded desk chair to deliver the punch line: "I didn't like the city." With that, his face crinkles into a laugh. Throughout his childhood, he played in his Chicago neighborhood's concrete lots, rescuing common weeds from sidewalk cracks and dreaming of wilder places.

Betz's energy animates his simple cotton slacks and work shirt, exaggerating the lankiness of his arms and legs while he practically dances through the story. "I would dig the plants up and replant them in the backyard. I made up names for them

because no one knew their names," he shakes his head. "They'd say, 'Bobby, don't you know that's a weed?' and I'd say, 'Well, what's that one?' 'Why, that's a weed too.' And I'd say, 'Do they all have the same name?'" Without an adult or local plant book to identify his burgeoning "prairie" garden, he gave them names like stinky plant, crooked leaf, and wedding bells. "No one would listen to me when I started talking about these things," he recalls, smiling. "I was a different kid."

Over the span of 45 years, this different kid would become known as "Mr. Prairie," the godfather of ecological restoration. He was one of the first to understand the importance of saving the eastern tallgrass prairie ecosystem. His infectious enthusiasm, inquisitive nature, ingenuity, and persistence inspired legions of closet naturalists and everyday folks to join him as weed-pulling, seed-hurling prairie advocates. He made dirty hands and muddy shoes a badge of action and optimism in what seemed to many a losing battle.

After earning his Ph.D. in biochemistry at Illinois Institute of Technology in 1955, Betz settled in the western suburb of Clarendon Hills with his wife, Eleanor, looking forward to a career in biochemical research. But in July of 1959, on a field trip to Santa Fe Prairie in Hodgkins, Illinois, he crossed paths with Floyd Swink, a passionate plant taxonomist with an encyclopedic knowledge of local plants, and his plans changed. Betz's simmering botanical curiosity had finally found a mentor. "The first time I saw Swink in action, naming all those plants," he shakes his head in admiration, "I got prairie fever."

Visitors to Santa Fe Prairie in Hodgkins, Illinois, beware — this is where Betz caught "prairie fever." *Photo by Jerry Kumery.*

Northeastern Illinois University hired Betz as a biochemistry professor by day. He devoted most of his other time, however, to outings with Swink and Ray Schulenberg, plant propagator at The Morton Arboretum, searching along railroad tracks where some prairie remnants still survived and learning the botanical names of native plants. "I'd come home with a headache learning all those names," recalls Betz.

Betz's blueprint for ecological restoration was born in an unlikely place: the cemetery. "It was August 7, 1961," he recounts. "I started walking railroad tracks looking for remnants, and one day I was along the CJ&E tracks in Will County. All of a sudden, down the track, I spied little Vermont Cemetery. It was the prairie compass plant that caught my eye." In fact, the cemetery was full of prairie species. With some research, Betz discovered there was no one looking after it, so he began to take care of it himself.

"These places were one-of-a-kind, but no one was doing anything to save them," recalls Betz. He soon obtained county maps that identified cemeteries and set out on his mission. In many cemeteries, he saw native plants that were growing stunted like bonsai — lawn mower victims. Like a country parson visiting his congregations, Betz talked to the cemetery managers, who were also local pharmacists and farmers, about ways to manage the grounds that would save these rare plots of native prairie. Then he moved on to the next cemetery.

"Lo and behold, the cemetery prairie was born out of his persistence," says Gerould Wilhelm, co-author with Floyd Swink of *Plants of the Chicago Region*. "Bob was looking for those little tinker bells of life in a landscape that was more than 99 percent weeds.... Had it not been for Bob, the prairies we have to inspire us would not be here." In all, Betz worked to save 44 prairie cemeteries.

These small remnants would have disappeared had Betz not reintroduced one key element: fire. Invasive species were creeping into nearly every prairie he knew of. Betz noticed that prairie plants weren't hurt by fire when the railroad crews burned the brush along the tracks. He began reading about Native Americans and their use of fire to improve the prairies for buffalo grazing. To resurrect the prairies, he realized, he had to bring back the natural process that had always sustained them. Betz's burning was in bold contrast to the then-standard land management policy of fire suppression.

"Try to remember, these people were odd," Wilhelm says, describing Betz and his growing crowd of supporters. "You just didn't do things like that.... But it's always people going against the grain who improve the environment. Betz was one of the first people to wade into the cold water and defy the doctrines of the day."

Betz (pointing) has shared his passion for native prairies over five decades.

"Fire came down from the past," explains Betz. "People couldn't believe it when I started talking fire. Even today, it's taken a long time for them to come around. But it felt right, and when all is said and done, we were right." In fact, many of Betz's methods have become standard practice today.

Despite protests from the mainstream, Betz continued to define the restoration movement. He developed his own approach, combining the scientific methods and principles he learned in school with a workman's practical tenacity. "I did what I felt was correct," explains Betz. "When things weren't quite right, I'd modify it. If there was diminution, I would stop. I was very careful."

Over the years, though, Betz learned that small prairies are easily stressed. For sustainability, size mattered. "To save the prairie in the long run, I had to get something big," he recalls. One day, on a field trip with Swink, his opportunity arrived. "Floyd said that the director of Fermilab was talking to the director of The Morton Arboretum about putting shrubbery in. And I said, 'They want to put in shrubbery? Why don't they put prairie in like it was before?' Nothing was ever done like that on a large scale and no one had thought of doing it before on former agricultural land. We were lucky Dr. Wilson, Fermilab's director, listened. I started putting lots of effort into Fermi because I couldn't do much more with the small remnants."

So in 1974 Betz began the ambitious prairie restoration project at the Fermi National Accelerator Lab in Batavia, Illinois. But by 1977, the project languished at 20 acres. One member of the grounds crew with farming experience had an idea. "Rich Kujath told Dr. Betz he could use a combine to harvest seed," explains Bob Lootens, grounds crew group leader. It didn't just work; they hit the jackpot. Kujath started harvesting more seed in one hour with the combine than volunteers were collecting by hand in a week. "That's when Betz really started thinking big. That's what started moving it ahead collectively — people with ideas," says Lootens. Today, Fermilab Prairie covers 1,200 acres of the 6,800-acre site, and its excess seed supports other prairie restoration projects.

"Betz met some resistance from us when he first came out," says Mike Becker, Fermilab grounds manager. "But if he's anything, he's persistent. He just got more and more into our heads with what he was doing and why he was doing it and the value of what he was doing. And one by one, he won us over."

At Fermilab, Betz learned new ways of sowing prairie seed.

Betz worked closely with the grounds crew, teaching them prairie ecology and experimenting with planting techniques and soil improvement, while at the same time collecting seeds from remnant prairies to help restore the prairie's biodiversity. His prairie walking tours and passionate, often hilarious lectures drew people out in droves to volunteer.

"Betz was never the 'protestor' kind of environmentalist," says Stephen Packard, director of Audubon-Chicago Region. "It's not so easy to get on people's wave length and build support for something totally new. Betz had a vision of people taking care of these places, just regular people. That was a very important contribution."

At age 81, Betz now spends more time drinking coffee with friends and enjoying his grandchildren when they visit. But prairies are never far from his thoughts, and his car still practically drives itself to nearby Fermilab.

One of Betz's favorite analogies is the prairie as battlefield. "Betz'd take the soldiers of the prairie world — the big bluestem grass, the rattlesnake master, the prairie dock — and he'd just throw them in," says Stephen Packard, paraphrasing Betz as he lobs an imaginary grenade. "He'd hurl them in against the barbaric hordes of weeds and brush. The brush would kill them, but he had more, and he'd just hurl 'em in and sooner or later he'd overwhelm them."

"In the end," Betz likes to say, "the battle will be won by the natives."