

# Richard Lowden and the flora of Franklin County

*To one OSU botanist, the humble urban vegetation under our feet is an obsession. He plans to do the first plant census in almost 100 years.*

By Jane Ware

Sometimes, when Richard Lowden tells people he's doing a survey of Franklin County flora, they'll say, "Franklin County? There's no flora in Franklin County." Lowden knows there is—though admittedly, what's flora to him is weeds to most of us.

The survey Lowden's doing of wild-growing vascular plants is the first anyone's undertaken in Franklin County in a hundred years. It's the earlier surveys—from the 1830s and 1890s—that make his especially interesting: When

he finishes next year, we may have the best information in the country for historical comparisons.

Franklin County flora is lucky to have Richard Lowden. He's a native Columbusite with a doctorate in botany from Ohio State; and he's crazy about vascular plants—all of them. Vascular plants are ferns, evergreens and seed-bearers; of the 1,887 species in Franklin County, the most common are the 202 composites (such as sunflowers, dandelions, thistles), the 145 grasses and

the 113 sedges. Lowden promises to treat them all equally. "Some botanists," he points out, "wouldn't even touch a grass."

He's also tenacious. For instance, he's been looking for a fern, *Woodsia obtusa*, which was found in the 1890s on the Scioto's east bank near Fishinger Bridge. One Sunday this summer Lowden covered six miles of Scioto River bank, just looking for this plant. During the week he was out twice again on the same mission. At last report, he hadn't



*Richard Lowden with flora at Antrim Park.*

Mark DeBlase/Rycus Assoc



found the Woodsia, but he was still hunting. Ferns, he says, can be hard to see.

Finally, Lowden is a glutton for work—though he says, “I don’t think of it as work. I like to do it.” He starts at 6 every morning and then puts in a 12-hour day—half indoors, half out looking for plants or visiting museums or libraries; and he works on weekends. He is embarrassed to admit this zeal: “People think I’m crazy.”

Part of Lowden’s job is to collect samples of Franklin County flora. A plant survey is based on specimens—including, if possible, root, stalk, flower, seed—that are dried, pressed, mounted on paper, classified and stored in a herbarium, a sort of plant library. Hunting for plants to collect has taken Lowden to places like drainage ditches, river banks and roadsides in every corner of the county; by now, he can tell you where

---

*“Water got into his boots,  
making his feet go slosh,  
slosh, slosh as he walks  
back to the parking lot.  
Even so, there’s a bounce  
in his step.”*

---

all the best weeds are. Blendon Township, he’ll say, is “very productive, especially the Red Hills east of Hoover Reservoir. Harrisburg is very interesting. So are the roads and ditches in Prairie and Norwich townships. Brown has very little—it’s been cleared for field crops. Big Walnut is wonderful. And in Westerville at the end of Park Street you’ll find a small park, Boyer Park, saved by the school system. It’s impressive for sedges.”

He likes Worthington, especially Antrim Park, just east of Rt. 315 below Rt. 161. There, on a hot day in early summer, he shows up in his usual plant-hunting garb—Bermuda shorts, T-shirt, tennis shoes. He’s come for an underwater plant that now should have the fruits that will identify it; he thinks this may be the first time it ever was found in the county. He is full of facts about Franklin County flora: For instance, Antrim Lake has five of the county’s 10 kinds of pondweed. Or, that Antrim Park is in Sharon Township, where the first collections in Franklin County were made in the 1830s.

Lowden walks toward the lake at a fast clip. He also talks at a fast clip, say-

ing that he grew up in Columbus near Overbrook Ravine, graduated from North High School in 1961, and earned bachelor’s, master’s and doctoral degrees at Ohio State, where he specialized in plant systematics, which means identifying and classifying plants. He has spent the last 20 years as a university professor in the Dominican Republic. His wife, Rafaela, also a professor, is a Dominican whom he met at Ohio State. Twenty years of immersion abroad have left Lowden with traces of a Spanish accent.

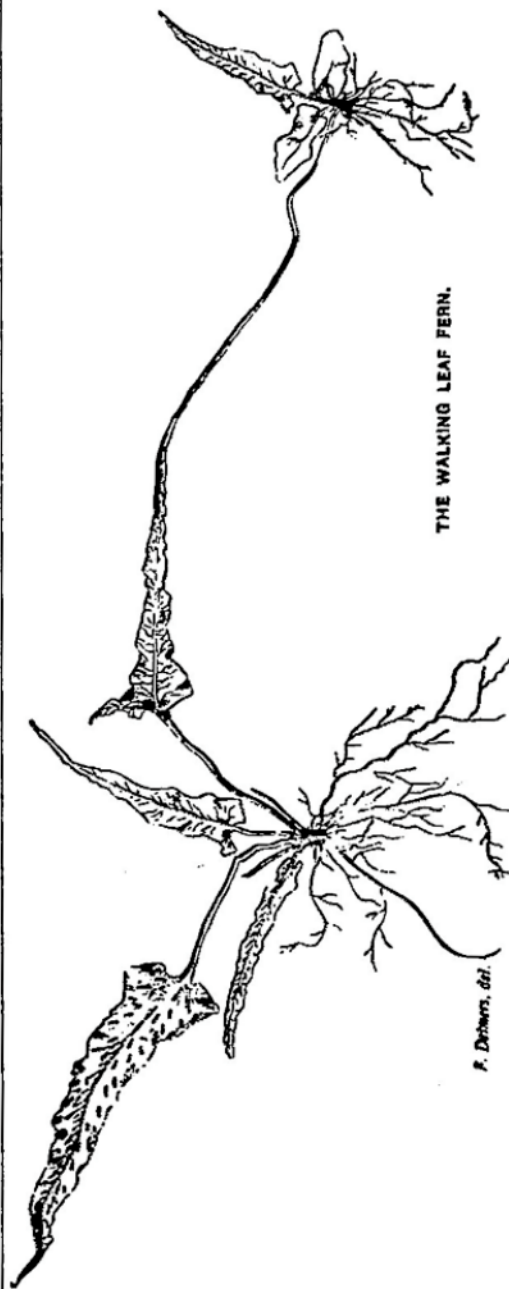
“I never thought I would return to Franklin County,” he says, as he pulls on knee-high rubber boots. This study was the lure. In shallow water close to shore, he collects several pondweeds and stashes them in a plastic bag. Though now they look like clumps of wet grass, ultimately they will be herbarium specimens with labels telling where and when they were found, and by whom; they are destined to be an enduring record of life in Franklin County in the summer of 1991.

Other life in Antrim Park includes walkers, joggers (Lowden himself jogs here regularly; with five laps he covers six miles), cyclists, rollerbladers, fishermen, people pushing babies in strollers. Sometimes park users will ask Lowden what he’s doing. One woman objected to his collecting. “She nagged me no end,” he recalls. “She would come up to me and say, ‘Oh, I hope you’ll leave us something.’”

With a flourish he pulls from the water the plant he came for—a fistful of greenish brown vegetation that he thinks is *Najas gracillima*, which never before has been reported in Franklin County. The telltale fruits are at the base of the leaves next to the stem; barely perceptible to the naked eye, they have to be magnified to reveal the patterns that distinguish one species from another. Picking at the plants in his hand, Lowden says one is an alga (not a vascular plant, it’s out of the province of his survey) and, squinting, he says he may have another *Najas*—another one never before found in the county. He is elated. Water got into his boots, making his feet go slosh, slosh, slosh as he walks back to the parking lot. Even so, there’s a bounce in his step.

But the next day, using his office microscope, he learns that the plant he thought was *Najas gracillima* is really *Najas minor*—not a new finding for the county at all. But the other plant is indeed—as he hoped—*Najas guadalupensis*, a Franklin County first.

Both are now among the 3,000 specimens of about 600 different species that Lowden has collected so far for this survey. Will he collect everything that grows in the county? That, he says, is impossible. No doubt, though, he’ll



THE WALKING LEAF FERN.



come as close as anyone could.

Lowden's interest in the flora survey is such that he worked on it for a year before he was formally appointed or paid a nickel—though he did know that some botanists at Ohio State wanted to do such an inventory for the 1992 quinquennial. Vacationing in Columbus in summer, 1988, Lowden touched base with the university, and the next thing he knew he was tracking down and indexing every written reference to every plant ever collected in Franklin County. When he went back to Santiago, he traveled with huge files on Franklin County flora; his secretaries there have typed 17,000 index cards for him.

By the next summer and again in 1990, he was hired formally—at least for the summers. He used the time to visit herbaria that have plants from Franklin County; thus he's been all over Ohio and to Champaign, Illinois, where the University of Illinois has an important early Franklin County collection; he's xeroxed the labels of almost 9,000 herbarium specimens and indexed them by collector, by place, by plant. Now, through all of 1991, he's been at OSU full-time as a visiting research associate in plant biology; recently, his contract was extended through 1992, which should allow him to finish. Officially, the survey is under the aegis of the Ohio State University Herbarium, whose director is plant biology professor Tod Stuessy.

Money does not grow on trees for projects like a Franklin County floral survey. OSU and its 1992 committee have provided some funding; so have the Ohio Biological Survey, the Columbus Foundation, Wolfe Associates and several individuals. But most of the money has come from the small Bill and Edith Walter Foundation, whose president, James E. Lane, general counsel for the Ohio Insurance Guaranty Association, has become interested in plants and even taken a couple of OSU courses on them. The flora survey, says Lane, is basic research—which means it's hard to raise money for. However, there are plans to computerize all the data. "We're looking at an online plant information system," Stuessy says. "It could tell a teacher who is going to Blendon Woods what's in flower."

Lowden says it's the chance to document change that particularly attracted him to this study. Franklin County flora's historical record began in the 1830s, when there were three noted plant collectors. Two were on the faculty of a medical college in Worthington. One, Jonathan Roberts Paddock, collected 104 plants around Worthington between 1833 and '40; it's his herbarium that's now at the University of Illinois. The other, John L. Riddell, published a catalog of 543 species of Frank-

lin County flora in 1834, which made it the first such list for a county west of the Alleghenies. Though the catalog is useful today, Lowden says it is not really so valuable as actual herbarium plants, which he calls "vouchers"—scientific proof of the plant and its identity.

The third early collector was William Starling Sullivant, a son of Columbus founder Lucas Sullivant. In 1840 he published a catalog of 657 species; 305 plants he collected are in the OSU Herbarium. Riddell and Sullivant were, Lowden says, "two of the most eminent frontier botanists."

The 1890s saw a resurgence of interest in Franklin County flora. The principal collector was Augustine D. Selby, a high school botany teacher. One of his colleagues was Moses Craig, who, starting in 1888, did a catalog of 339 plants on the Ohio State campus as a thesis for his bachelor's degree. But since 1900, there's been little research in the county's flora—Lowden says the

---

*"Having shown the walking fern to this writer, he observes that now two people have seen this plant for the first time in a hundred years."*

---

emphasis has been on the state level. The hiatus makes him the first person to take a serious look at Franklin County flora in almost a hundred years.

Next year, Lowden expects to have all his data in a computer, which will allow him to document changes. He may find that as many as one third of the county's wild plants are introduced species. In 1899, Selby toted up 974 species for Franklin County and called 82 percent natives and 18 percent introduced—up from 12 percent in 1840. Ronald Stuckey, OSU plant biology professor and botanical historian, thinks that because of this ongoing influx of new plants, Lowden will find a significant increase in the total number of species.

Stuckey, who has surveyed early records of many localities, thinks that probably Hamilton County—not Franklin—has the "best" historic information in the state, because it had more early collectors. Moreover, says Stuckey, Franklin doesn't have the most interesting county flora in the state, because it doesn't have the greatest diversity of habitats. What it will have, though, is an updated survey with good baselines

as far back as the 1830s. "To my knowledge," says Stuckey, "that is unique in the United States."

Another result Stuckey anticipates might come as a surprise to some botanists: "We may find out we haven't lost as many species as might be expected." For example, he says, Lowden has seen the walking fern again. Franklin County may not have many different habitats, but it does have out-of-the-way nooks where unusual plants can survive. One is Wyandot Grove, where Lowden was the first person in a hundred years to see the walking fern in Franklin County. Although some people might have assumed the walking fern was extinct because no one had seen it for so long, Lowden says, "No one looked for a hundred years. The word 'extinction' should never be used unless you search to no end."

Today's remnant of the once extensive Wyandot Grove is a small, all but unknown ravine between Dublin Road and the Scioto River in a corner of Washington Township. Lowden found it because he was looking for the walking fern, which Selby said he collected in 1889-'90 at Wyandot Grove—which no one today has heard of. Lowden tracked it down through Henry Howe's Historical Collections of Ohio, which referred to Abraham Sells as, in the late 1800s, owner of Wyandot Grove. Lowden called County Engineer John Circle, who located Sells's land for him on an old map.

To reach this ravine, Lowden parks off Dublin Road and leads the way under the road and through a small woods. He climbs down a steep 40-foot bluff; and at the bottom, he enters a different world—cooler, shadier, damper, with a small creek trickling toward the Scioto. The place is a microniche—a pocket habitat—and Lowden has combed every inch of it. "Isn't it beautiful?" he says. "Can you believe you're in Franklin County?"

He comes to a five-foot-high boulder in the creek; it's covered with moss and even a few saplings have taken root. On the sides of the big rock, Lowden finds the walking fern, a small plant with leaves shaped like elongated hearts. At the point of some leaves a long stalk is growing with a tiny new plant at the end. Lowden says that is why it's called walking fern—it progresses by steps.

Having shown the walking fern to this writer, he observes that now two people have seen this plant for the first time in a hundred years. He bounds up the stream, searching for another boulder where the fern also grows. "Finding that fern," he says—"It really made my day." □

---

*Jane Ware is a free-lance writer in Columbus.*