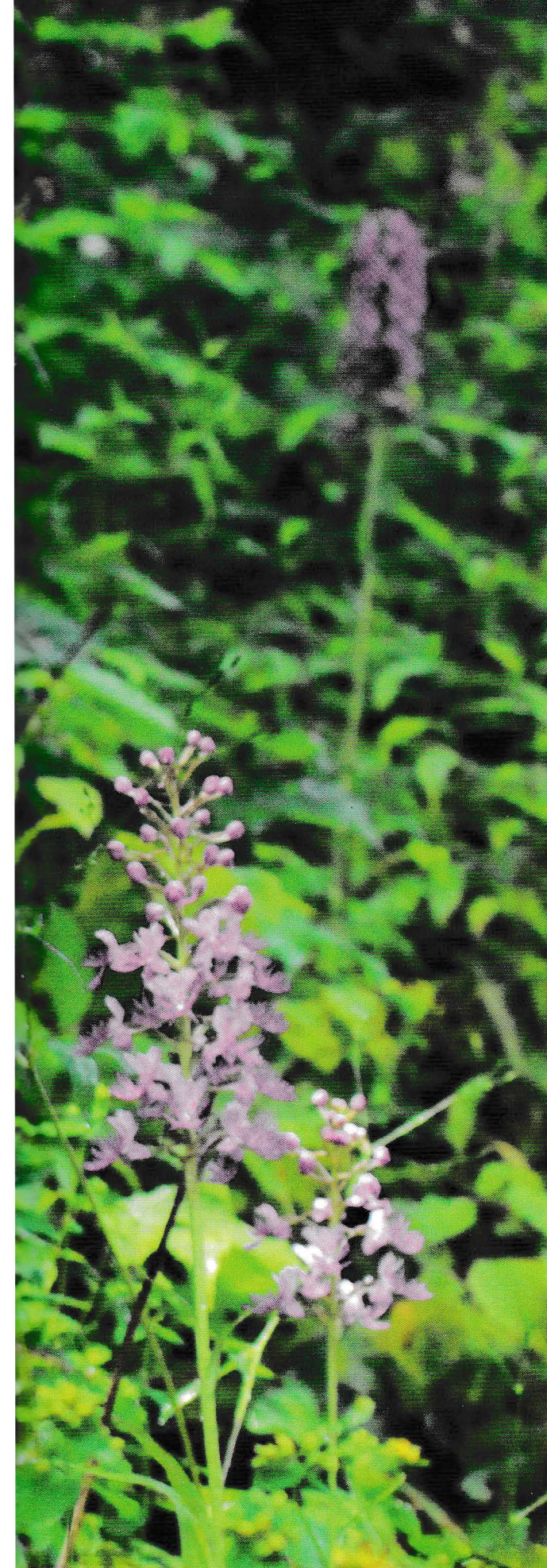


A Shriver's purple-fringed orchid blooms in Pocahontas County.

# Like Being a Treasure Hunter

Three orchid enthusiasts find a previously unidentified species in the Mountain State.

WRITTEN BY J. KENDALL PERKINSON  
PHOTOGRAPHED BY CLAIRE HEMME



**O**n July 17, 1992, Scott Shriver and Clete Smith left their homes in Pittsburgh and headed south toward West Virginia's Pocahontas County in search of *Platanthera x keenanii*, one of the rarest orchid hybrids in Appalachia. The trip would set them on a 15-year journey that would culminate in the recognition of an entirely new species.

Calling Shriver and Smith "orchid enthusiasts" would be selling their passion for the family of plants a bit short. "We became literally obsessed with them," Smith says. The fixation led them to take long expeditions to every state in southern Appalachia, trying to find as many species as possible. "We'd get home at 4 a.m., sometimes. It would be a 22-hour day we would be in the car together talking about orchids."

Often, they would get out of their car and walk for miles, sometimes over steep and rugged terrain—excursions that have caused Smith numerous knee surgeries, a broken leg, and a ruptured Achilles tendon. When they weren't spotting plants, the friends were often reading scientific articles, participating in forums, or leading discussions about their passion.

"Orchids are a family of plants that are essentially at an evolutionary pinnacle," Shriver says. "They're the most advanced of all plants in the way that human beings are the most advanced of all mammals. They have very complex life cycles. If you talk about rare jewels, diamonds and rubies are at the top. If you talk about rare and exciting plants, orchids are at the top. So it's kind of like being a treasure hunter while we're out there in the woods."



Clete Smith, left, and Scott Shriver discovered a previously undescribed orchid, the *Platanthera shriveri*, with Shriver's late father Albert, for whom the plant is named. Shriver's tattoo commemorates the discovery.

## A Budding Compulsion

Orchid obsession gained national notoriety in the late 1990s and early 2000s thanks to Susan Orlean's bestselling nonfiction book *The Orchid Thief*, which became the basis for the critically acclaimed film adaptation starring Nicholas Cage and Meryl Streep. Both the book and the film center around Orlean's desire to understand the passion orchid lovers experience for the plants—and the incredible lengths enthusiasts have gone to to find the rarest specimens.

Charles Darwin was himself an orchid obsessive, and found great inspiration in Orchidaceae. He used to take walks with his family to a place they affectionately called “Orchis Bank” for the several varieties of flowers found there. It was in his seminal work *On the Origin of Species* that Darwin first postulated his notion of coevolution: “how a flower and a bee might slowly become, either simultaneously or one after the other, modified and adapted in the most perfect manner to each other.” In the following years, his entire family became involved in observations and record keeping at Orchis Bank. His

next book, *Fertilisation of Orchids*, fleshed out his theories in greater detail.

Like Darwin, Shriver and Smith's early orchid hunting expeditions also centered around family. On the day they met in Pennsylvania's Raccoon Creek State Park, Scott Shriver was hiking with his father and fellow enthusiast Albert Shriver. Clete Smith passed them on the trail and they struck up a conversation that would turn into a long-term friendship among the three men, centering around their shared passion for orchids.

The trio's increasingly frequent expeditions were often spent in West Virginia. “West Virginia has more orchids than any of the other states around it,” Scott Shriver says. “That's one of the things that's great about the Mountain State.”

Several orchid species and other flora thrive in soil with high acidity—conditions often created by mining activity, especially in areas that have been allowed to recover for 30 or 40 years. New variations of habitat can also be created by the building of roads and clearing of farmland.



The Shrivens and Smith noticed their orchid was paler, had fewer flowers, and bloomed later than the species it most closely resembled, the *Platanthera grandiflora* or “purple fringed” orchid.

“Everyone thinks that these areas of human disturbance are horrible things,” Scott Shriver says. “They're not always horrible things, because some species like moderate disturbance in order to do well. A lot of people say, ‘Don't disturb the land.’ But ultimately, they're reducing biodiversity when they say that.”

It's not just reclaimed coal mine properties that make West Virginia great for orchids. The state also has a wide range of elevation, lots of woodlands and farmland, and plenty of water. This variety of habitats means there are more ecological niches to fill and thus a wider variety of Orchidaceae.

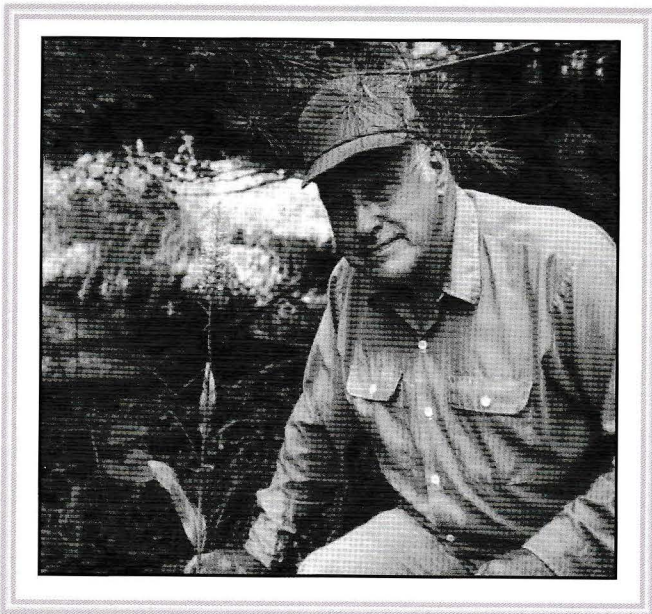
## The Discovery

On their rare orchid hunt in July 1992, the Shrivens and Smith managed to locate the *Platanthera x keenanii* they had set out to find, which was exciting. But they also noticed a lone specimen that seemed a little different from the 70 or so species

they were keeping tabs on. Its color was paler, its clusters of flowers were a little more sparse, and it seemed to be blooming about two weeks later than the species it most closely resembled, the *Platanthera grandiflora* or “purple fringed” orchid.

The men took note of the plant and were surprised when they came back the next year to see several others in the same area. This meant that the first specimen had not been a genetic anomaly. They decided to start a discussion about their find in the orchid community. “That discussion lasted 15 years,” Scott Shriver says.

Over that time, they continued their many expeditions, working together to study and identify their find. They eventually compared it to specimens at 34 institutions, some of which had been collecting plants for 500 years. They uncovered several early discoveries of the plant—one as early as 1905—but found it had always been lumped together with other species.



Albert Shriver accompanied his son Scott and their mutual friend Clete Smith on many orchid-hunting expeditions to West Virginia. He passed away in 2008.

Classical botanist Paul Martin Brown agreed the men had discovered something that deserved its own designation and determined to help them publish their findings. Albert Shriver had passed away by the time the discovery was published in the *North American Native Orchid Journal* in 2008, so Scott Shriver and Clete Smith decided to honor his memory by naming the species after him. The plant is now officially known as *Platanthera shriveri*, or “Shriver’s purple-fringed orchid.”

Shriver and Smith now believe their orchid is an ancient hybrid of two others. Hybrids often die out, but if they end up fitting a certain ecological niche, they can develop over hundreds or thousands of years into their own unique species. This happens with both plants and animals.

“To the layman, everything is easily discerned as a species,” Shriver says. “Dogs are dogs and cats are cats, and they’re different. But in the story of evolution, things are ebbing and flowing all the time. Whether you call it a new species or not is unimportant.” In other words, nature isn’t as neatly delineated as we like to pretend.

Now that *Platanthera shriveri* has gained acceptance as a unique species, sightings are beginning to roll in. Since publication, more than 40 sites have been identified from North Carolina to Pennsylvania. But most can be found in the hills and hollows of West Virginia, where the shared passion of family and friends first yielded this beautiful discovery. 🍄

COURTESY OF SCOTT SHRIVER