



## On the Trail with Doug McGrady by Anne Raver

Exploring the Blackstone River floodplain  
PHOTOS BY ANNE RAVER

I like being on—and off—the trail with Doug McGrady. Sometimes, he veers off into the brush or through the trees or into the swamps, and you just follow. Or not, it's up to you. I've seen more than one cautious soul turn back as Doug keeps a brisk pace up and down hills, across streams too wide to leap (wear boots, balance on rocks or embrace wet feet), through buggy meadows (insect repellent helps), and along marshes stinking of rotting seaweed at low tide. If someone whines, Doug observes him with the same imperturbable gaze he lends most of the natural world. "Well, you can backtrack to the parking lot and wait for us there, if you like. But we'll be a while." Then he marches on, the rest of us hustling to catch up.

I know I haven't mentioned any plants yet, but I go on these hikes to get the general lay of the land, to admire the tall spruces in the Black Spruce Bog in Exeter, feeling the springy mat of sphagnum moss beneath my feet before sinking into a pocket of groundwater up to my knees.

I enjoy the camaraderie of the intrepid plant lovers on these walks, some of whom get down on their hands and knees to aim a hand lens at the sticky red gland-tipped hairs of the round-leaved sundew (*Drosera rotundifolia*), a carnivorous plant that engulfs unwary insects and digests them with its enzymes. If the leaves are spoon-shaped, by the way, you're looking at spatulate-leaved sundew, (*Drosera latifolia*).

Doug had hoped we would see sweeps of Canada rosebay, or rhodora (*Rhododendron canadense*), but it had bloomed all over the bog a couple weeks before. "Here's one!" said Becky Setje, kneeling over a bush with one rather tired-looking flower. Doug had seen the bog awash in pink, and showed us some spectacular images on his tablet. It made us hungry to return next year.

He pointed out the insignificant yellow-green flowers of mountain holly (*Ilex mucronata*), a tall shrub way over our heads (its red berries sustain wildlife). He noted the differences between two blueberry species thriving in the bog. The urn-shaped white flowers of black highbush

blueberry (*Vaccinium fuscatum*) bloom on bare branches, and its twigs are downy; *V. corymbosum* blooms after the shrub's reddish-green leaves unfurl in spring.

Doug has a quiet voice, so you need to stay close to catch what he says about some species found along the way.

On a hot, muggy July afternoon on the Blackstone River floodplain in Woonsocket, we found a little patch of hispid hedge nettle (*Stachys hispida*) blooming in an open grassy area. Its little lavender, orchid-shaped flowers were whorled around the hairy stems. "I found it here around six years ago," said Doug. "It's the only place I've seen it growing in Rhode Island."

We trotted after him as he scrambled up a steep incline to the top of a ridge beneath a power line. A variety of sun-loving species, native and non-native, were thriving in the disturbed, sandy habitat.

"Tree of Heaven, *Ailanthus altissima*, a Chinese species," Doug said, pulling off a leaf and crushing it. "Smells like burnt peanut butter." He crushed a few yellow flowers of shrubby St. John's wort (*Hypericum prolificum*) to show how the reddish-purple juice stained his fingers. "Supposed to be the blood of Christ," he said, with a skeptical smile. (It also supposedly blooms on John the Baptist's birthday.)

It's not just the walks that I love, it's all the questions they raise and the other people who offer their expertise. On one walk Wendy Miller identified a spring azure nuzzling the New Jersey tea

Black Spruce Bog



The sandy shoreline of Three-Cornered Pond



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(*Ceanothus americanus*). This butterfly lays her eggs on the leaves, which provide food for her larvae.

We found three species of wild grape that afternoon, including river grape (*Vitis riparia*), which was flourishing on the floodplain. Doug pointed out its coarsely toothed, glabrous leaves with hardly any tendrils on its vines. “I’ve never seen it in any other place on Rhode Island,” he said.

We peered at the rounded green fruits nestled in the leaf axils of the orange-fruited horse gentian (*Triosteum aurantiacum*). The green spheres turn orange as they ripen. “The Iroquois used them to soak sore feet,” says Doug.

He nodded, deadpan, toward another invasive species: “That’s a junked car,” he said, for once not offering the Latin name for the rusting metal smothered with vines.

Doug finds these diverse areas by looking for green blobs on Google Earth. Then he heads out on foot to explore the site, using GPS and Google Docs to record his route as well as the exact position of the plant and animal species he finds. “It’s my personal GIS (geographic informationsystem),” he says. Perhaps he will offer a workshop.

The self-taught naturalist is a network engineer by day, meaning he builds computer networks for groups like the Department of Justice. I imagined him mucking around the swamps as a kid, but no. “I went to a RIWPS flower show about 20 years ago and saw an exhibit of Ell Pond in Hopkinton,” he said. “There were pitcher plants in there. I’d grown up in Coventry but never knew we had pitcher plants. The challenge was to go to Ell Pond and find a pitcher plant.” He did, and the rest, as they say, is history.

He took a week-long course on field botany with Lisa Gould. He went to sedge camp at the Eagle Hill Institute, in Maine. “A week of looking at sedges, in the field,” he said. He took classes at the New England Wild Flower Society and soon joined the New England Plant Conservation Program (NEPCoP),

volunteering to look for rare species. He has located half a dozen species, including a population of chaffseed (*Schwalbea americana*)—about half an acre on Cape Cod,” he said. The species, federally listed as threatened or endangered, hadn’t been seen in New England for over 40 years.

“You can go to places you didn’t know existed and find plants you didn’t know existed,” he says. “I grew up here. I thought I knew everything. I didn’t know anything.”

He shares his reports with the Rhode Island History Survey as well as NEPCoP. He also collects specimens for Tim Whitfield, collections manager at the Brown University Herbarium.

You won’t hear any of this from Doug, unless you play reporter and interview

shirt hurtling into the phragmites, while we’re still staring down at some rare orchid that hasn’t bloomed yet (that little weedy looking plant you almost stepped on).

On a muggy, buggy afternoon in late June at the Haile Farm Preserve in Warren, Doug pointed out a white-fringed bog orchid growing in an open area. “I counted these in 2006 for the Plant Conservation program and found 187,” he told us. Returning to the preserve in



The little pink flower of blood milkwort, or purple milkwort (*Polygala sanguinea*), blooming on the Palmer River marsh.



An Io moth (*Automeris io*) caterpillar, found feeding on a black cherry leaf at Three-Cornered Pond.

him. “Anyone who spends time with Doug knows how modest he is,” says botanist and RIWPS treasurer Brian Maynard, who teaches plant sciences at the University of Rhode Island. He adds that Doug is held in high regard by Northeastern botanists.

“His passion and dedication are his real strength,” said Brian. “His record keeping and attention to detail is unsurpassed, even by most in the scientific community. Anyone looking for a particular plant, especially rare ones, just need ask Doug. He has maps of every rare plant in Rhode Island. He’ll also offer to meet you at the spot and help you find the plant. Doug is a classic amateur botanist in the classiest, most honorable sense.” To us, he’s the nimble plant guy in the bug-resistant blue

July, he counted 492, many of them blooming.

“I think this is the largest population in the state,” he said later. Such information is not only important for scientific records, it also helps groups like the Warren Conservation Land Trust protect rare species by locating trails, for instance, outside of their range and not broadcasting their existence to the public. That day Doug was also counting the handsome fuzzy yellow thistles (*Cirsium horridulum*), rare in most of New England, including Rhode Island, but flourishing on the edge of this marsh.

He pointed out Baltic rush (*Juncus balticus*). It is easy to miss because it grows among the more common saltmarsh rush (*Juncus gerardii*), which looks much like it. “This is a first for Rhode Island,” said Doug, who found two patches here and another in Bristol County.

As I go on these walks, it dawns on me that every plant is important to something or somebody. And many are disappearing, the victims of development, climate change, invasive species. But I’m strangely



Taking a woodland path through a shrubby ground cover of black huckleberry (*Gaylussacia baccata*) near the Black Spruce Bog.

comforted, as I trot along after Doug. Last August we walked along the perimeter of Three-Cornered Pond, one of the coastal plain ponds, or kettle ponds, at Myles Standish State Forest in Carver, MA.

I was drawn to the carpets of pine-barren false heather (*Hudsonia ericoides*) growing beneath the pitch pine and bayberry and wondered if I could encourage the species to ramble as a ground-cover in my own sandy garden. It was a day of sun and clouds, and from moment to moment the light shifted over the rushes and sedges. Swaths of bog muhly (*Muhlenbergia uniflora*) looked like mist hovering over the water.

We saw many ferns, including the netted chain fern (*Woodwardia areolata*), growing in the shade of winterberry and blueberry. We heard the sweet call of a hermit thrush. We found a spiny green caterpillar with a red and white stripe eating a black cherry leaf. I took a picture and emailed it to entomologist Doug



Bayonet rush (*Juncus miliatris*) and reflected sky in Three-Cornered Pond.



Heading across the Palmer River salt marsh at the Haile Farm Preserve

We sloshed through the shallows, bending over to peer at the little flowers of pink tickseed (*Coreopsis rosea*)—pink petals with yellow centers—rare in Rhode Island but as prevalent here as a daisy. Dragonflies were mating, flying together, end to end. As some of them dipped over the pond, we wondered if those were the females, dropping their eggs.

Tallamy, who replied, “There are 456 caterpillar species associated with black cherry. This is the Io moth caterpillar, and it loves black cherry.”

This is what I mean by associations. You tuck one more under your hat on these walks and feel more at home in the world. Doug suddenly charged up over a bank, and disappeared into a forest of tall pitch pine, carpeted with blueberry and huckleberry. We found him peering up at tall mountain hollies, now full of red fruit. “We saw these at the Black Spruce Bog,” Doug reminded me.