

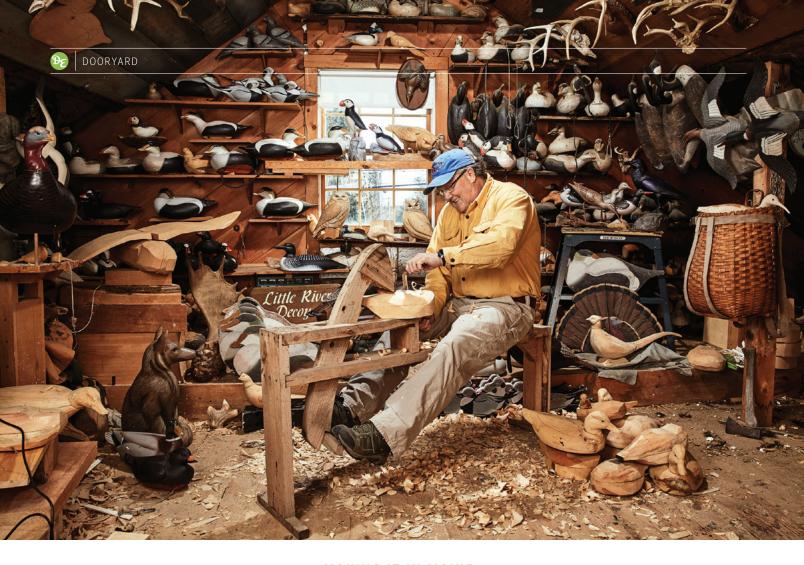
IN AUGUST OF 1937, a crew from the Civilian Conservation Corps completed the final link of the nascent Appalachian Trail – right here in Maine, between Sugarloaf and Spaulding mountains. The construction of the iconic footpath, stretching 2,190 miles from Georgia to Katahdin, owed to the efforts of dedicated trail clubs and volunteers. To celebrate the AT's 80th anniversary, we checked in with five trail stewards, from all walks of life, who help make Maine's 282 miles of trail a wilderness experience like no other.

BY KATHRYN MILES • PHOTOGRAPHED BY MICHAEL D. WILSON

KEEPERS of the TRAIL

Victoria Jofery, Saddleback ridgerunner for the Maine Appalachian Trail Club.





MAKING IT IN MAINE

Bird Man

For almost 40 years, Steve Brettell has worked with monkish devotion in a tiny attic workshop, crafting countless exquisitely lifelike duck decoys.

n a cramped attic above a 200-year-old garage in Biddeford, Steve Brettell keeps an aviary of suspended life: there are red-breasted mergansers, whimbrels, eiders, blue bills, puffins, old squaws, pheasants, goldeneyes, white-throated sparrows, black-bellied ployers – even a few duck butts, "Gotta

have some duck butts," Brettell says. The carvings are done in local white pine and wrought with a minimal spread of tools: band saw, pneumatic sander, several 2-inch knives, and a handful of

BY JAED COFFIN PHOTOGRAPHED BY MICHAEL D. WILSON

paintbrushes for applying acrylics and oils. In the middle of the shop, surrounded by wood shavings, is an oak bench at which Brettell sits when roughing out a body with a drawknife.

One of few full-time bird carvers in Maine, Brettell, now 60, began carving in his early 20s to support his passion for hunting sea ducks. "I didn't have any money when I got out of college," he says. "I couldn't afford decoys and I thought: well, maybe I can make them! So I bought some wood and just started whacking away." Little River Decoys was born. Brettell's first efforts, four black ducks, still hang in his workshop. "Wouldn't part with them for anything," he says.

In those days, he was a park ranger at Portland Head Light and spent another 40 hours a week in the attic. After he began winning awards at decoy shows up and down the East Coast, he approached a business-mentoring program in Portland for advice. "They told me, 'This isn't a business. You can't make a living doing this,'" Brettell recalls with a shrug. "I guess I just wasn't smart enough to stop."

Over the next 20 years, he gained a steady stream of patrons: bird people, hunters, and folks who just admired

DOORYARD

CRITTERS

Ladies and **Gentlemen, the Beetles**

A meditation on a garden pest. BY GREG WESTRICH PHOTOGRAPHED BY MICHAEL D. WILSON

stand in the backyard holding a plastic bucket containing several inches of soapy water with airy foam on top. It's a cool morning, the second week in July. I snatch a sluggish Japanese beetle off a

skeletonized potato leaf and drop it in the bucket. It sinks through the soap bubbles into the water, where it will drown.

I walk along each of the 10 raised beds and two strips of garden, collecting beetles. They shine like pounded copper. Their wing covers – called elytra – send light glancing in all directions off the ridges that run their length. Their heads are metallic green, but depending on the angle of the light sometimes appear the same copper color as the elytra. Along the thorax, on each side below the wings, are five tufts of white fur.

All the beetles are almost exactly the same size, roughly a centimeter from the tip of their frond-like antennae to their pygidium. Their bodies are rounded domes. As I pick one up between my index finger and thumb, it wiggles, extending its two hind legs like articulated needles. Its legs are stout

enough that they feel capable of drawing blood from my finger. The elytra feel like tiny scythes. I drop the beetle in the bucket and examine my fingertip. There are tiny cuts and tears in the whirls of skin.

Two beetles sit on top of one another on a feathery cosmos leaf. I hold the bucket under the leaf and knock them in. Before they're warm enough to fly, Japanese beetles elude capture by dropping off their perch toward the ground. Later in the day, after the sun has raised their body temperature, flight is their preferred means of escape. It makes them much harder to collect, which is why I am spending my morning patrolling the backyard.

In 15 minutes, I have nearly 50 in my bucket. Any soap foam is gone now. The dead and dying Japanese beetles look almost black. They've turned the water the color of weak tea. I set the bucket on the back steps. Later in the day, I'll capture another 40 or 50. They've only recently begun to emerge. Their numbers will increase through July and August until they're a noisy swarm. I cannot win. Experts don't talk about getting rid of Japanese beetles; they talk about managing them.

Japanese beetles eat 300 different kinds of plants. They eat leaves, flowers, and fruit. From year to year, they favor different plants. Two years ago, they were mostly on my strawberries and blackberries. They also killed a young apple tree. Today, I found not one on the strawberries, nor any on my surviving apple tree.

I hate Japanese beetles. I get a perverse pleasure in feeling their scratching legs on my fingertips, trying to escape my grip, and I have been known to laugh out loud as I drop beetle after beetle into my bucket.

f you collected one of every multicellular species on Earth - every plant and every fish, every mammal and fungus, every bird and reptile, every animal and creepy crawly – one in five would be a beetle. There are 4,000 species of mammals, but more than 350,000 kinds of beetles. In North America alone, there are 24,000 species of beetles, nearly 2,900 of which can be found in Maine.

Japanese beetles are members of the scarab family, a large group of diverse and often showy beetles. The family includes recyclers such as dung beetles. The scarab venerated by the ancient Egyptians was one of these and gave the family its name. Some are bumblebee mimics and important plant pollinators. Others are attentive parents that dig burrows and feed their growing young bits of rotten leaves. The scarab family also includes june bugs that noisily crash into windows and screens on early-summer nights across eastern North America.

After lunch, I step out the back door and pick up the bucket. A sharp metallic tang rises from the darkened water with the floating carcasses. I walk the flowerbed along the back of the house collecting beetles. They seem especially fond of black-eyed Susans, most of which have damaged petals and at least one beetle nestled against their dark-brown centers.

As soon as I disturb a plant, the beetles take flight. Their flight is fast and loud. They are not adept at maneuvering. One clinks against the right lens of my glasses, then heads in a straight line across the lawn to where the peas climb a trellis.

On the head of a daisy, a bulbous flower-crab spider holds a Japanese beetle in its embrace. The spider is white, the color of the petals, with yellow lightning bolts on it abdomen. The comatose beetle is larger than the spider. I have never seen one fall prey to anything but me. As an experiment one August, I live-captured a handful of beetles, cupping them in my hands, and tossed them into the chicken yard. The hens ran over to investigate. They fought each other for a chance to peck at the beetles, then turned away in apparent disgust. Maybe Japanese beetles taste bad, or maybe their hard exoskeletons discouraged the chickens. Whatever the reason, I learned that I was

Japanese beetles were first discovered The beetles are native to Japan and

on my own in ridding the yard of them. in North America at a nursery in Riverton, New Jersey, in 1916. It's believed that some larvae hitched a ride in a shipment of iris bulbs from Asia before 1912, when the U.S. government began inspecting plant and food shipments. From New Jersey, they ate their way across the country. In 1939, an adult Japanese beetle was found in a car getting off the ferry from Maine in Yarmouth, Nova Scotia. By 1972, despite federal and state efforts to contain the beetles, they had crossed the Mississippi River. Today, they can be found in every state east of the Great Plains and all of eastern Canada. northern China, where they're not major pests. Parasitic wasps, diseases, and other natural factors keep them in check. Here in North America, there are few natural

controls. Each year, the USDA estimates, Japanese beetles cause \$460 million in damage to crops, ornamental foliage, lawns, and golf courses.

Much of the damage is done by the larvae. Japanese beetle grubs live in the soil, eating grass roots. The grubs are inchlong, plump white worms with brown heads and legs at one end. They lie tightly curled in the soil. Chickens and other animals love to eat them. Most summer mornings, I find dozens of small holes in my lawn where a skunk has dug up grubs overnight. Lawns and golf courses with infestations of Japanese beetle grubs often develop rings of dead grass. Replacing damaged sod and fighting grubs account for almost half of the economic cost caused by Japanese beetles.

As winter creeps down into the ground, the grubs burrow deeper into the soil and remain inactive until spring. But as soon as the soil warms, the grubs begin feeding again until they pupate. In Maine, the adults begin to emerge around the Fourth of July, sure as backyard bottle rockets, an unwelcome harbinger of midsummer.

ucket in hand, I stand looking down at the row of beans, the purple beans hanging below the canopy leaves. Many of the leaves are skeletonized. Japanese beetles eat only the soft, fleshy meat of the leaf, leaving the veins intact. Most of the damaged leaves have at least

