looking inside.

During the height of their population, Eastern Bluebirds were as common as American Robins are today. Their numbers dropped drastically in the middle of the last century as farming practices changed and open space was lost to development.

Bluebirds prefer open meadows, which offer an abundance of insects that constitute the majority of their warm-weather diet. They build their nests in cavities, but their beaks are not strong enough to excavate their own nests so they re-use cavities created by other birds like woodpeckers.

Most of Natural Lands' 44 nature preserves include some meadow habitat, ideal for nesting Bluebirds. To give the population a helping hand, we've installed nest boxes on our properties—350 boxes, to be exact!

Volunteers are an essential part of this low-tech but effective initiative to augment natural nesting cavities. Every week from April 1 through the end of July, a cadre of volunteers monitors each of those 350 boxes, recording details like what species of bird takes up residence in the box, the number of eggs laid, and when and how many baby birds hatch and fledge. Volunteers also construct and install the boxes.

John Barbis joined Natural Lands' Force of Nature® volunteer program in 2016, and has been a Bluebird nest box monitor for the past two years. He shared his experiences "in the field" with *Natural Lands* editor Kirsten Werner.

Kirsten: *What about the nest box monitoring program made you want to volunteer?*

John: This may be childish, but I am getting to do something that every adult told me not to do when I was young. As a kid, I was fascinated by the Robins building their nests in shrubbery and the Pheasants that would nest in the bushes. But that curiosity was stifled by the warning: "Stop checking on them or you will make the parents abandon the nest and babies." Now I get to do it for science.

Also, this work is a chance to observe how one small part of nature changes with the seasons. There are the first signs of nest building, the amazing nests, the first eggs, the first hatchlings, the fledglings, and finally the empty nest. I clean out the old nest and pretty soon the cycle starts again, often with another species taking over the box.

K: *What was it like the first time you opened a box and saw eggs or hatchlings inside?*

J: Actually, for me, watching the progress as the birds build their nests is just as exciting as seeing the first eggs of different colors or the first tiny, naked baby birds. Until I started volunteering, I never knew how exquisitely beautiful and comfortable-looking Chickadee, Bluebird, or Tree Swallow nests were! Often the only way to get an accurate count of the number of eggs or hatchlings is to carefully reach into

the nest and manually count them. Touching those warm eggs and tiny bodies is just plain moving.

K: *Were you a birding enthusiast before volunteering?*

J: I was a nature enthusiast and as such interested in birds. I would not consider myself a hardcore birder; I was more interested in birds' role in nature rather than someone who was anxious to complete a list. I did not know as much about nest construction and having the opportunity to learn more about that was fantastic.

K: *Has there been anything unexpected about volunteering as a monitor?*

J: I've developed a dislike for House Wrens. I try hard not to ascribe human motives to animals, but the propensity of House Wrens to disrupt the nests of other birds is phenomenal. And they are like the Energizer bunnies of bird reproduction! How those small creatures can produce such large clutches—relative to their size—over and over again all summer long is astounding. Bluebirds are temporary renters at best; House Wrens own the boxes.

Also, I was surprised at the personal investment I felt as the avian families that inhabit my boxes (they do become "my boxes"!) grow or sometimes fail. Sometimes a box is raided by a predator, ants take over the nest, or House Wrens will build their messy-looking, stick-filled nests right over Chickadee or Bluebird eggs and young. I am monitoring nature, and death is an integral part of nature. So, in a way I've learned a bit about myself at the same time I learned about cavity-nesting birds. ■

find nature. find yourself.

For decades, researchers have been studying the science behind the notion that time spent in nature improves our mental and emotional well-being. Alice Vache (above right) is not a scientist, but in 2016 she began a very personal "study" of the healing powers of nature after the sudden death of her son Andrew.

"Shortly after Andrew's funeral service, my dear friend Suzie called and suggested we go for a walk at Binky Lee Preserve, which is only a few miles from my house," said Alice. "Meadow grasses were waving in the sun, the air was heavy with the scent of summer blooms, and I felt just a bit of my pain begin to ebb."

It was on that first hike together that Suzie told Alice about Natural Lands' Find Yourself Outside challenge: visit all our featured preserves (currently 19 of them), which stretch from the Poconos to the Delaware Bay. By the time they made their way back to the car, Alice had decided to join her friend for the challenge.

By the beginning of 2017, the pair had visited all the preserves except Mariton Wildlife Sanctuary in Easton and Bear Creek Preserve in Luzerne County. They saw wildlife, wildflowers, and wildly rushing waterfalls. Sunshine and rain storms, birdsong and blustery winds. Many times they got turned around but always found their way. "All of these experiences were ours and every step was restorative."

Last summer, almost a year to the date of their adventure's inauguration, they traveled north to visit the two final preserves. That same summer, family and friends gathered at ChesLen Preserve in Coatesville to remember Andrew and dedicate a bench and red oak tree in his memory. It has become a spot where family comes to cry, smile, and think of him.

Said Alice, "Suzie and I walked together through my sorrowful 'valley of the shadow of death' for two years. On the journey, I did indeed find myself outside, and it was beautiful." ■

Mae Axelrod