

Fluttering Back

Native plant gardeners revive a butterfly thought extinct

WRITTEN BY MADELINE BODIN

AS SANDY KOI LED A GROUP OF CHILDREN through Esplanade Park in downtown Fort Lauderdale in 2001, she was wrapped up in telling the story of the coontie (*Zamia pumila*); there are several large coontie plants at the edge of the park's native plant garden. She told them how it was the only cycad (a family of primitive, cone-bearing tropical and subtropical plants) native to North America and how the slow-growing plant was pushed to the brink of extinction by the starch industry at the turn of the 20th century.

In the back of her mind was the rare butterfly whose caterpillar is entirely dependent on the leaves of the coontie for its food. The atala butterfly (*Eumaeus atala*) had been thought to be extinct in the middle of the 20th century. Its fortune faded when the coontie's did. However, the butterfly had been rediscovered in the Florida Keys in 1979, and there had been some restoration efforts. Atalas are uncommon, though, and Koi had never seen one. She took a closer look.

"And there they were, flitting around in the dappled light like the winged jewels that they are," says Koi.

Atalas have velvety black wings frosted with iridescent blue and green, with orange-red spots on their wings and bodies. Their wings are the size of a quarter.

"I was entranced," Koi says.

Since that day, Koi has made atalas her life's work. She has organized two re-introduction efforts and is now a doctoral student studying atalas at the University of Florida. Scientists now know that this species' population naturally explodes and dwindles. Atalas cannot, however, survive without coonties, and since the wild coontie population all but died out just as development exploded in South Florida, atala restoration has relied on native plant gardens.

South Florida has several programs that encourage homeowners to garden with native plants, including the Fairchild Tropical Botanic Garden's Connect to Protect and Broward



Sandy Koi encourages gardeners to plant coontie as habitat for Atala butterflies.

CREDIT TO COME

County's NatureScape.

Not all gardeners are pleased to see atalas, though, no matter how imperiled or colorful they are. When their populations boom, the caterpillars can chew both native and expensive imported cycads to shreds.

Part of Koi's work is organizing rescues. She places unwanted atala caterpillars with native plant gardeners who welcome them. When the atala population plummets, she typically has a waiting list of disappointed atala fans.

Karen Malkoff is one of the native plant gardeners who have fostered a relocated atala colony. Malkoff's yard has dozens of the shrubby, fern-leaved coontie plants tucked under palms and citrus trees, but the payoff was not immediate. "I had coonties for years before I saw my first atala," Malkoff says.

After meeting Koi at a butterfly event at the Fairchild, Malkoff was not surprised to get a call and later find Koi on her doorstep with a small plastic container filled with coontie leaves and homeless atala caterpillars.

Koi's most recent project is researching basic information about the atala: How long do its eggs take to hatch? How many days does it spend as a butterfly? Previous records were inconsistent. Getting it right means that Koi's days are spent in the lab, counting and watching, and not outside sharing her love for nature with others.

That hasn't dampened her enthusiasm, though. She says, "Twelve years later, I am still entranced with the butterfly and the plant." 🌸



Atala butterfly caterpillars on coontie (*Zamia pumila*).

PHOTO COURTESY OF JC HERNANDEZ