Acorn Watchers Wonder What Happened to Crop

By Brigid Schulte
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The idea seemed too crazy to Rod Simmons, a measured, careful field botanist. Naturalists in Arlington County couldn't find any acorns. None. No hickory nuts, either. Then he went out to look for himself. He came up with nothing. Nothing crunched underfoot. Nothing hit him on the head.

Then calls started coming in about crazy squirrels. Starving, skinny squirrels eating garbage, inhaling bird feed, greedily demolishing pumpkins. Squirrels boldly scampering into the road. And a lot more calls about squirrel roadkill.

But Simmons really got spooked when he was teaching a class on identifying oak and hickory trees late last month. For 2 1/2 miles, Simmons and other naturalists hiked through Northern Virginia oak and hickory forests. They sifted through leaves on the ground, dug in the dirt and peered into the tree canopies. Nothing.

"I'm used to seeing so many acorns around and out in the field, it's something I just didn't believe," he said. "But this is not just not a good year for oaks. It's a zero year. There's zero production. I've never seen anything like this before."

The absence of acorns could have something to do with the weather, Simmons thought. But he hoped it wasn't a climatic event. "Let's hope it's not something ghastly going on with the natural world."

To find out, Simmons and Arlington naturalists began calling around. A naturalist in Maryland found no acorns on an Audubon nature walk there. Ditto for Fairfax, Falls Church, Charles County, even as far away as Pennsylvania. There are no acorns falling from the majestic oaks in Arlington National Cemetery.

"Once I started paying attention, I couldn't find any acorns anywhere. Not from white oaks, red oaks or black oaks, and this was supposed to be their big year," said Greg Zell, a naturalist at Long Branch Nature Center in Arlington. "We're talking zero. Not a single acorn. It's really bizarre."

Zell began to do some research. He found Internet discussion groups, including one on Topix called "No acorns this year," reporting the same thing from as far away as the Midwest up through New England and Nova Scotia. "We live in Glenwood Landing, N.Y., and don't have any acorns this year. Really weird," wrote one. "None in Kansas either! Curiouser and curiouser."

Jennifer Klepper of Annapolis even blogged about it. "Last year our trees shot down so many acorns that you were taking your life into your own hands if you went outside without a crash helmet on," she wrote this month. "But this year? Forget it."

Louise Garris lives in an Arlington neighborhood called Oakcrest, which is home to towering oak trees. When she couldn't find any acorns, she began putting out peanuts for the squirrels. Last year, oaks in metropolitan Washington produced a bumper crop of acorns, and squirrels and other urban wildlife produced an abundance of young. This year, experts said, many animals will starve.

Garris started calling nurseries. "I was worried they'd think I was crazy. But they said I wasn't the only one calling who was concerned about it," she said. "This is the first time I can remember in my lifetime not seeing any acorns drop in the fall and I'm 53. You have to wonder, is it global warming? Is it environmental? It makes you wonder what's going on."

Simmons has a theory about the wet and dry cycles. But many skeptics say oaks in other regions are producing plenty of acorns, and the acorn bust here is nothing more than the extreme of a natural boom-and-bust cycle. But the bottom line is that no one really knows. "It's sort of a mystery," Zell said.

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A word about the mighty oak. Long before people paved over the area, much of the Washington region was covered by oak and hickory forests. There are at least 20 different species of oak trees in the region, and they produce acorns on different cycles: white oaks every year and red oaks every two years. Each tree, too, has its own two- to four-year cycle, producing many acorns one year and few in other years. Stressed trees, including those trying to survive extended drought conditions in the Washington region, often wildly overproduce acorns to ensure the survival of the species.

Oaks are one of the few trees that can self-pollinate and "clone" themselves. But they prefer the genetic variety that comes from the flowers of male trees pollinating the flowers of female trees. That's a dance that takes place every spring, usually in May, for anywhere from seven days to two weeks, depending on the weather.

And the weather is critical. A late frost can kill the flowers and any chance of pollination. But there was no late frost in this area last year, according to the National Weather Service. Gypsy moths and other insects can damage trees, but because the pollen is airborne, insects don't play much of a role in oak reproduction.

That leaves Simmons's theory. Last spring was so wet, he reasoned, perhaps the pollen was washed out of the air and down storm drains before it had time to do its work.

Ed Zimmer, regional forester for the Virginia Department of Forestry, doesn't buy that.

"It would have to be Noah's flood kind of rain for me to believe that. Forty days of constant rain," he said. "I don't think that could be a factor because there's so much pollen and all these trees release it at different times, depending on if they're in full sun or partial sun, or even from different places on the tree."

But last May, when the oak trees would have been busy flowering, coating cars and sidewalks with a thick dusting of golden pollen, the National Weather Service logged 10.6 inches of rain at Reagan National Airport -- three times the normal amount, making it the third wettest month on record since 1871.

Whatever the reason for no acorns, foresters and botanists are paying attention.

But they say they're not worried yet. "What's there to worry about?" said Alan Whittemire, a botanist at the U.S. Arboretum. "If you're a squirrel, it's a big worry. But it's no problem for the oak tree. They live a long time. They'll produce acorns again when they're ready to."

White oaks can live as long as 300 years. Faster-growing red oaks can reach 200. And it takes only one acorn to make a tree, he said, which in an urban area with little open space is often more than enough.

"This is probably just a low year, a biological event, and it'll go away," Zimmer said. "But if this were to continue another two, three, four years, you might have to ask yourself what's going on, whether it is an indication of something bigger."

Foresters survey acorns, nuts and berries for their annual "mast" report that helps wildlife managers figure out how much food there might be for deer, bear and other wildlife. Those reports can fluctuate, and the foresters have noticed how "spotty" it is this year in parts of Northern Virginia.

"This is interesting enough to ask some questions and pay attention to," said Adam Downing, forestry and natural resources agent with the Virginia Cooperative Extension. "Fortunately, natural systems are resilient. Oaks are tough."

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Rachel Tolman, a naturalist at Long Branch, smeared a big glop of peanut butter on one of the nature center's trees. She grabbed handfuls of store-bought hazelnuts and placed them atop boxes to attract the tiny, nocturnal flying squirrels that tend to mass in the oaks every winter. Within seconds, the squirrels dive-bombed in from nearby trees, legs outstretched like fist-size silvery-gray sky divers. "They're so much more willing to be seen this year," Tolman said. "It's because they're so hungry."

Tolman was the first naturalist to notice that there were no acorns or hickory nuts this year. Each fall, starting in September, she takes daily walks through the forest to collect nuts and acorns to feed the flying squirrels and other animals at the center through the winter. This year, she found nothing. "I'm hoping this is just some weird anomaly," she said.

Hazelnuts gone and peanut butter licked clean, the still-hungry flying squirrels scampered high into the tree canopy and chirped angrily for more.