

A black squirrel is shown climbing a tree trunk. The squirrel is positioned vertically, facing downwards, with its head turned slightly to the right. Its fur is a deep, glossy black, and its tail is bushy and also black. The tree trunk has a rough, textured bark. The background is a plain, light color.

Myths & Realities of

A black squirrel is one of nature's great "gotcha" moments, as if something shaped like a squirrel couldn't possibly be that color. Those who have never seen a black squirrel before often describe their first sighting as something magical. Some quite literally doubt their senses.

"...I saw a black squirrel today while returning to work from lunch through a residential area of Des Plaines, IL," wrote one visitor to the *Chicago WILDERNESS* online message board. "After a double-take and verification that I was awake, I returned to my desk and jumped on the Web to verify that such a critter existed and now I no longer need to question my vision or sanity."

With its shiny, bottomlessly dark coat, a black squirrel stands out vividly at a distance, and is instantly memorable. Relatively little is known with scientific certainty about the specifics of black squirrel life. Still, scientists have come to some tentative conclusions about Chicago-area black squirrels, mainly from encountering them in gray squirrel studies. Black squirrels are not a separate species at all, but a melanistic morpheme, casually known to scientists as a "color morph," a fairly rare genetic variation. In the Midwest, as far as has been determined, all of the black squirrels are actually morphs of the gray squirrel, *Sciurus carolinensis*.

Some black squirrels aren't pure black, but have unpredictable patches of gray or white. Some have even been reported as having a black front half and gray hindquarters or other strange combinations.

Scientists are curious about whether these mutations come complete with predictable behavior and size components, but as yet no studies have been funded. "It would probably cost around \$500,000 to do the needed breeding and genetic experiments," says Joel Brown, who is a professor of biological sciences at University of Illinois at Chicago and runs a citizen-based monitoring program called Project Squirrel. "Since grays are not an endangered species, there are definitely better things to do with that kind of money."

Still, black squirrels seem to engage the inquisitive zoologist in all of us. Marty Mueller of Mount Prospect, Illinois, relates how every Halloween, the black squirrels in his backyard get into the spirit of the season, if not into his heart. "Every time I look out there, at least one black squirrel is perched on top of one of my pumpkins. They look at me, and then they just go back to burrowing into them." They have also carried away ears of corn from his decorative stalks. Mueller has resorted to dosing his jack-o'-lanterns with hot sauce, but it doesn't seem to

The "black squirrel" of Chicago Wilderness is actually a dark form of the gray squirrel. It's most commonly seen in northern Chicago and suburbs. Photo by Rob Curtis/The Early Birder.

the Mysterious BLACK SQUIRREL

By Nancy Shepherdson

faze his black invaders. "I never saw the gray squirrels do any of this. The gray squirrels will run away if you yell at them, but not these guys!"

With this phenomenon fueling his curiosity, Mueller started a thread about black squirrels on chicagowildernessmag.org that has attracted almost 60 postings and is one of the most active on the message board. Web surfers followed Mueller's lead and quickly chimed in with reports of their own, excited to share their discovery of nature in the neighborhood. At times, the comments sounded like a support group for those who had seen alien spacecraft: "I thought I was seeing things until I found on this web site that they really do exist." "I'm hoping [the black squirrel] won't be too elusive so I can get a picture of him to prove to my friends that I'm not making it up!" "I don't know of anyone who has [run] across [these] little creatures in the city. I'm glad to know I am not alone now."

Others remarked on the squirrels' looks, from "the black squirrels are gorgeous, their coat has a nice sheen in the sun" to "they look like black rats." Pieced together, the entries leave the reader with the impression of a creature both fat and skinny, aggressive and gentle, ratlike and gorgeous. Verified facts about this seemingly exotic animal are somewhat harder to come by.

Black squirrels on the Eastern seaboard are far more likely to be fox squirrels. No one knows why. In fact, the first fox squirrel observed in the 18th century was a black one, forever causing the species to be known to science as *Sciurus niger*, or black squirrel. The fox squirrel, which usually has a rusty or orange tinge, is bigger than the gray and has a temperament that allows it to feed more successfully with predators around. However, in the absence of predators, gray squirrels, despite their smaller size, typically chase the fox squirrels out.

According to a radio-tagging study by Daniel L. Rosenblatt, a graduate student under Ed Heske of the Illinois Natural History Survey, fox squirrels will leave an area for good if a threat becomes too severe. Grays (and blacks), on the other hand, will quickly retreat to the nearest tree but stay close by. And that very behavior helps explain the appeal of black squirrels, says Heske. "Grays and blacks pay attention to you; they're keeping an eye on you. They're interested in finding out if you're a food source." In fact, Joel Brown discovered that people may preferentially throw more food to blacks than to other squirrels, which could explain some of their seemingly pushy behavior.

People who report seeing huge black squirrels are probably not from around here. They are almost certainly seeing black

fox squirrels. And people who say their black squirrels are smaller than the grays? "Probably an optical illusion," says Brown. Gray squirrels, but usually not the black morphs, have white guard hairs that are longer than their gray coats. "It gives them a halo effect and makes them look bigger."

However, some of those smaller blacks, especially the ones with sparsely haired tails, may actually be juveniles. Brown believes that many black squirrels may not get a chance to grow very old, given their possibly dangerous tendency to stand out against a white or green background. Some scientists, says Brown, speculate that black squirrels aren't necessarily easier targets for predators, especially in winter when many predators migrate. "But tell that to the squirrels," he laughs.

From his own observations and those of visitors to his Project Squirrel Web site, Brown concludes that black squirrels are more common in the northern suburbs of Chicago than in other parts. He attributes that finding to, of all things, leash laws. Loose dogs and cats are much more prevalent in the south and west areas of the city and suburbs. Given the gray squirrel's lower predator tolerance, fewer grays, and therefore fewer black morphs, make their home there. Oak Park recently got a leash law, though, so they may be seeing more black squirrels in the near future. And we can all expect more Web postings about those mysterious, enchanting squirrels of a different color.

Professor Joel Brown invites Chicago WILDERNESS readers to report squirrel sightings at squirrel.bios.uic.edu. Join our message board at chicagowildernessmag.org/blacksquirrels.

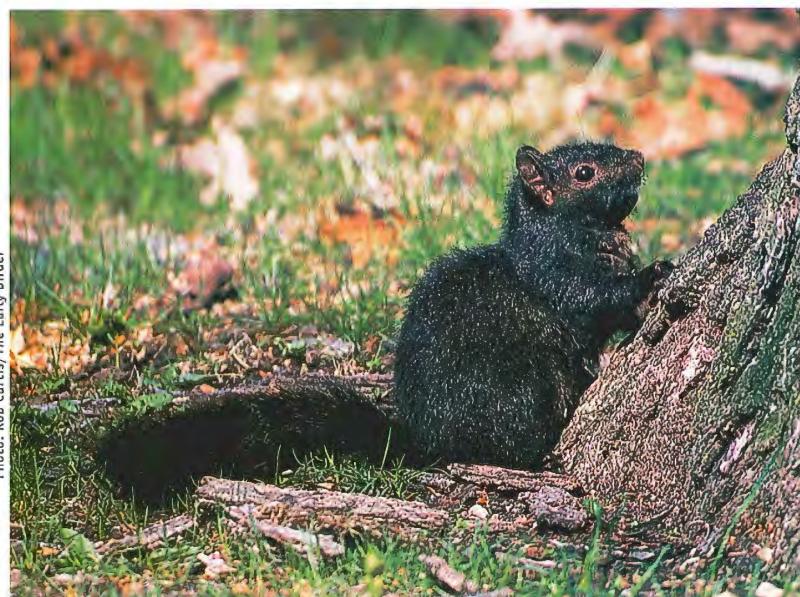


Photo: Rob Curtis/The Early Birder