

Why the flaming carcasses of electrocuted birds keep starting Colorado wildfires

September 5 2024, by Elizabeth Hernandez, The Denver Post



Credit: CC0 Public Domain

In the past two months alone, the flaming carcasses of electrocuted birds have ignited at least three wildfires in Colorado.

While the phenomenon sounds straight out of a cartoon, it's actually more common than you'd think, experts said. It's a big enough problem

that electric utility companies brainstorm efforts to mitigate bird electrocution, said Taylor Barnes, a Fort Collins-based biologist and geographic information systems specialist who co-authored a 2022 study titled, "[Wildland Fires Ignited by Avian Electrocutions](#)."

Researchers found no coordinated records or data illustrating how frequently electrocuted birds dropping off power lines spark wildfires, so they sifted through Google searches of avian-induced fires in the United States from 2014 to 2018 and found 44 reported cases.

California had the highest number of incidents at 15. Colorado had two in 2016—one in Littleton and one in Berthoud, the study found.

However, in July and August of this year, Colorado's Front Range has been the scene of at least three reported bird combustions resulting in wildfires.

Investigators determined the flaming carcass of an incinerated bird sparked a July 13 brush fire in Arapahoe County that burned more than 1,100 acres and destroyed property southeast of Byers.

On July 31, the West Metro Fire District responded to a small brush fire in Jefferson County near Morrison after a bird was electrocuted by overhead power lines, caught on fire and fell to the ground, igniting the grass and brush below, the fire district said.

And on Tuesday, firefighters from West Metro and South Metro Fire Rescue responded to a 35-acre brush fire burning near a Denver Water treatment plant and Roxborough Park in Douglas County. Officials said the cause appeared to be a bird that hit a power line and fell to the ground, catching the grass on fire.

No humans were injured in these brush fires, and they were all

contained.

"We're getting more grassland or [wildland fires](#) from birds than we normally do," said Mark Jurgemeyer, interim chief operating officer of CORE Electric Cooperative, which services more than 375,000 Coloradans with electricity.

CORE, which serves areas in Adams, Elbert and Douglas counties, was the provider for at least two of the recent avian electrocution incidents, in Byers and Roxborough Park.

Xcel Energy and CORE both serve the Morrison area, so that one is trickier to determine, Jurgemeyer said.

Xcel Energy was the first utility in the country to enter into an agreement with the U.S. Fish and Wildlife Service to proactively address issues involving birds and powerline structures, said Michelle Aguayo, Xcel Energy media relations representative. The 2022 plan included developing a schedule for retrofitting high-risk electrical equipment with roosting deterrents or bird flight diverters.

"We understand our infrastructure can be attractive to birds for roosting and building nests and can pose a collision or electrocution hazard to birds," Aguayo said. "Our facilities are designed to meet industry standards that prevent or reduce the likelihood of avian incidents."

Jonathan Ashford, fire investigator with the West Metro Fire Protection District, said that, during Tuesday's fire investigation, they found four birds with varying degrees of burn damage in the area of the fire's origin near an electrical line. Normally, a bird in the path of fire would fly away, Ashford said, so this was a good clue that the burned birds started the fire.

Ashford said he believed the birds likely would have been close enough together to face joint electrocution.

There are a couple of reasons why birds are increasingly meeting an end better suited for the "Final Destination" films.

It's partially because of [climate change](#), Barnes said.

An electrocuted bird is more likely to ignite a fire if conditions are dry, he said. Nearly half of Colorado is now in drought or has near-drought conditions, according to the most recent report from the U.S. Drought Monitor.

In July, a series of wildfires burning along the Front Range foothills killed one person, destroyed structures, caused the governor to activate the Colorado National Guard and enveloped sweltering metro Denver in a heavy cloud of smoke.

In addition to climate, there is the human introduction of electrical utility equipment into the environment, Barnes said.

Birds can sit on one wire, no problem. But if a bird touches a second wire, it opens a path of electricity right through the bird's body, with a resulting zap that can be potent enough to send the bird up in flames.

Larger birds like hawks and eagles can be more at risk of electrocution, Barnes said, because their wider wingspans put them at greater risk of touching two different wires simultaneously.

There are ways to design power poles and their accompanying structures to make them less susceptible to bird electrocution, Barnes said.

Barnes works at EDM International, an electrical utilities consulting

company, where the biologist tackles this very issue.

For new electrical poles, Barnes said designers can ensure enough space between "energized components" to allow birds to exist without touching two electrical components at once.

However, many utility companies can't rip out and replace all their infrastructure, Barnes said, so there are ways to retrofit existing equipment to make it safer for birds. For example, utility companies can cover problematic wires or exposed electrical equipment with insulating material or put cages around pieces they don't want birds coming into contact with.

"It's amazing how resourceful birds can be when they want to be," Jurgemeyer said. "We are constantly trying different products and different ways of working with vendors to come up with stuff that doesn't exist to figure out ways to keep animals away from those energized parts."

Sometimes smaller birds on the hunt for bugs will drive their beaks under insulated coverings in hopes of a snack, only to find an electrical jolt instead, CORE's Jurgemeyer said.

"Every utility in the country that has overhead [power lines](#) has the same, exact problem," he said.

EDM International prepared CORE's latest aviation protection plan, Jurgemeyer said, to go over what they're doing right and wrong to best protect area [birds](#).

"It is more common than people realize," he said.

2024 MediaNews Group, Inc. Distributed by Tribune Content Agency,

LLC.

Citation: Why the flaming carcasses of electrocuted birds keep starting Colorado wildfires (2024, September 5) retrieved 6 September 2024 from <https://phys.org/news/2024-09-flaming-carcasses-electrocuted-birds-colorado.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.