

It's for the BIRDS



On the cusp of summer, as the tourists flock back to Ouray, so do the town's most famous avian summer residents: the Black Swifts of Box Canyon Falls.

It's an exciting time for Sue Hirshman, a Ouray transplant and retired teacher from Indiana who has devoted the past 25 years of her life to observing and documenting the Black Swifts.

In a good year the canyon is home to about a dozen breeding pairs, comprising Colorado's largest Black Swift colony.

As the dusky little cigar-shaped birds whiz on extra-long, scythe-like wings toward Box Canyon from their wintering grounds in the lowland rainforests of Brazil, at a rate of 400 kilometers per day, it seems like a miracle to Hirshman that they can make it here at all. Somehow, they always do.

But this year, she's worried about what will greet them on their arrival.

Over the past few years, human visitation at Box Canyon Park has skyrocketed to almost 90,000 visitors annually, more than double what it was 10 years ago.

In the past, humans and swifts seem to have shared the canyon rather well.

"But we are getting more and more and more people," Hirshman tells me, as we greet each other in the parking lot outside the Park. "Ninety-eight percent of them are great. I like those people. But there are just always a few...They get in the water. They do not respect the birds. I have seen so much stuff that goes on in this canyon. It's unbelievable. I'm so upset."

The City of Ouray, which owns and operates Box Canyon Park, charges visitors \$5 apiece to see Box Canyon Falls. With the increased visitation, the Park has lately become quite the cash cow for the City's coffers, raking in almost \$384,000 last year, according to City Resource Manager Rick Noll.

>>>

BY SAMANTHA TISDEL WRIGHT



The Black Swifts Conundrum at Box Canyon Falls

Hirshman recently learned that plans are in the works to use some of that money to extend an existing metal walkway deep inside the canyon, all the way back into a narrow fissure behind the waterfall — a favorite nesting site for the swifts. Other improvements include a new “Buddy Bench” on the canyon floor, inviting tourists to linger longer than she thinks they should.

A constant presence in the canyon, Hirshman is not afraid to berate visitors in the park who let their kids climb on the damp cliff walls where they might destroy a hidden nest, or who bring picnics inside the canyon, leaving food scraps behind that could attract rodents, or who ignore the sign she put inside

the canyon: “Please respect the birds. No flash photography.”

“The flash can blind their eyes, and also create stress,” Hirshman explains.

Last summer, someone wrecked the sign, and the City has not replaced it yet. Hirshman is beside herself — about the sign, the bench, and especially the proposed walkway extension.

“Progress is progress, but come on,” she says. “There needs to be some pushback because of the over-visitation of this place.”

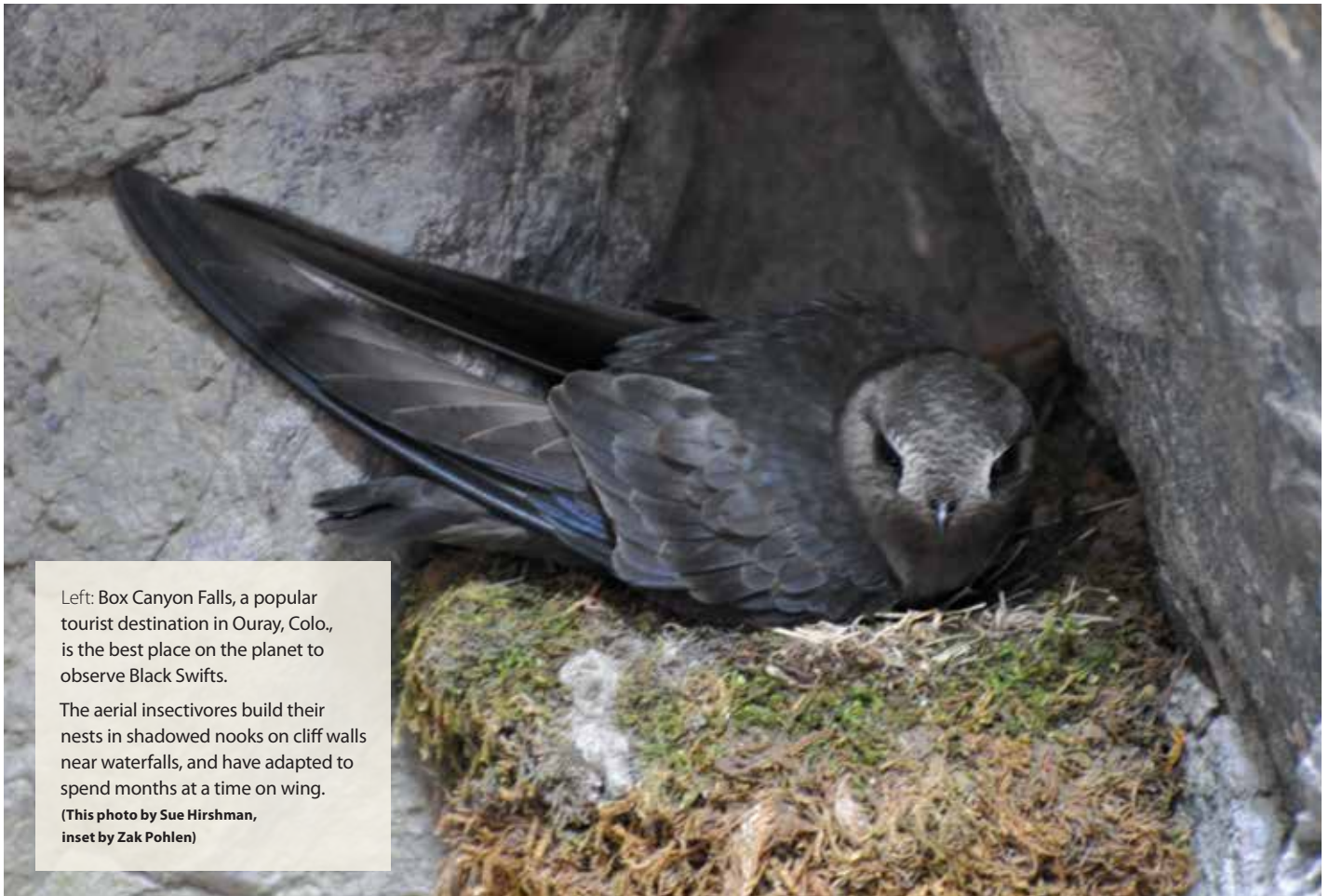
She plans to discuss the matter with the new City Administrator as soon as possible.

But on this day, in the third week of May, we are here to hunt urates. If we

find fresh streaks of the concentrated urine full of white ammonia crystals staining the dark gray canyon walls, it’s a sign the Black Swifts are back in residence for the summer.

And if they are indeed back, as Hirshman suspects, this would be the earliest they have ever returned to Ouray since she began observing the colony way back in 1996.

Everything is early this year: The box-elder trees and scrub oak are already leafing out and the chokecherry bushes on the hillside froth with creamy blossoms. The air smells like honey. The creek has already passed peak runoff. Broadtail Hummingbirds buzz the air. The parking lot brims with cars. >>>



Left: Box Canyon Falls, a popular tourist destination in Ouray, Colo., is the best place on the planet to observe Black Swifts.

The aerial insectivores build their nests in shadowed nooks on cliff walls near waterfalls, and have adapted to spend months at a time on wing.

(This photo by Sue Hirshman, inset by Zak Pohlen)

Black Swifts' breeding range is dispersed across the Mountain West, southern Alaska, and southwestern Canada. A new monitoring program set to launch this summer seeks to estimate the density and abundance of Black Swifts in Colorado. (Photo by Rob Sparks)



Ready or not, Box Canyon Park is officially open for the summer.

Hirshman, a slight, slender woman in her 80s, carries all the accoutrement of a hard-core birder: the binoculars and the notebooks and the heavy Nikon D-90 with the long zoom lens.

"Some people could care less about birds," she tells me as we get ourselves organized to go into the Park, her midwestern accent finding a diphthong in every vowel. "But once you know about the Black Swifts, they will blow your mind."

For starters, they're called "swifts" for a reason. Once they arrive, the adults will zip through the dusky canyon so swiftly (at speeds of up to 100 mph) that to the untrained human eye, their movements are nothing but a specter.

Their plumage blends in perfectly with the canyon walls — adults have an overall dark, sooty color, with just a frosting of white across the face. They are generally about seven inches long — smaller than a robin, but bigger than a chickadee or swallow — with large, dark eyes, and weigh less than two ounces apiece.

Swifts can remain airborne for months at a time, performing fleet-feathered aerial maneuvers in search of the flying insects that are their prey.

The chicks, which generally hatch in late June, are easier to spot.

All gray fluff and wide, winsome eyes, they sit in solemn solitude in their mossy nests, peering out at the parade

of human interlopers, waiting like patient baby buddhas for their parents to return from the day's hunt with milky boluses of regurgitated flying insects.

By late July or early August, the chicks are spending most of their time hanging out on the rims of their nests to exercise their wings, flapping as fast as a hummingbird to get in shape for their maiden voyage — an epic 4,000 mile migration from Box Canyon back to Brazil.

If all goes well, they'll return a few years later to build nests of their own. But these days, experts think Black Swifts are in trouble.

Designated as a species of continental concern in both the U.S and Canada, the birds have lost 94 percent of their population, according to one survey, with an estimated 20,000 of them left in the world.

"Other aerial insectivores (swallows, martins, nightjars, whip-poor-wills and flycatchers) aren't faring much better, implying that large scale factors are causing the decline," writes research biologist and leading Black Swifts researcher Rob Sparks, who works at the Bird Conservancy of the Rockies. "There is an urgent need to fill information gaps when it comes to the Black Swift and other aerial insectivores."

Box Canyon Falls is helping to fill those gaps, since it supports the largest Black Swift colony in Colorado and affords unique opportunities for study of the elusive species. Most of the active

nest locations are known (thanks largely to Hirshman's work) and are visible from the ground or installed walkways in the canyon — if you know how and where to look.

At the visitor center, I pay my \$5 park entrance fee. (Hirshman always gets in for free.)

Inside, there's a Black Swift display that people walk right past on their way to use the restrooms. It includes interpretive signage, a stuffed Black Swift specimen, dangling from a wire inside a plexiglass case with its wings outstretched stiffly in perpetual flight, and a livestream seasonal video feed of one of the nests inside the canyon. The livestream, linked to the "Visit Ouray" website, made its debut last summer and was a hit with birders around the world, revealing a plethora of new information about Black Swifts' activity at night.

But mostly, visitors at Box Canyon Park aren't here for the birds. They are here to have their minds blown by the waterfall.

The jaw-dropping natural wonder is within easy walking distance of downtown Ouray. Over eons, the turbulent meltwater of Canyon Creek has sliced a narrow maw through fault-weakened limestone to form a misty grotto where thousands of gallons of water per minute thunder through crooked crags of pre-Cambrian rock to the canyon floor.

Except for the metal walkway that leads like a gangplank back into the canyon's guts (the better for tourists to take in the spectacle), there's precious little horizontal real estate inside the canyon, and none that is far from the waterfall spray zone. Which is just the way the Black Swifts like it.

"One thing that surprises me, in all seriousness, is that they are supposed to be a bird that enjoys this privacy and loves dark dank places and they don't like the company of other birds," says Glynn Williams, who has worked as a cashier at Box Canyon Park for a dozen years. "Yet we get all those people up there, and the swifts keep returning every year. It's a very convenient place that they can come and spend the summers."

Hirshman and I are walking now along a short nature trail that leads into the canyon. Along the way, she points out this bird and that bird. A bright yellow Western Tanager; a gang of Evening Grosbeaks.



She also points out what's missing. "We used to have a Dipper nest down there," she says. "And we used to have a Canyon Wren. Beautiful. I love that sound. They are not here anymore. Neither are the butterflies."

Across the canyon, near the tree where the Canyon Wren used to have its nest, someone is building an enormous new house right on the escarpment. More evidence of human encroachment. More cause for worry.

The trail leads straight into the shadowy maw of Box Canyon as the swollen creek rushes by, 50 feet below. We can't even see the waterfall, yet already it blows its misty breath in our faces, daring us to come inside. It sounds like a freeway at rush hour, getting louder and louder the further back we go, until we are swallowed by the roar.

I shiver as we pause briefly at an interpretive sign, glad to be wearing my winter coat.

"Nests — A Rare Treat," the sign says. "The niche across the creek holds a special treat, a chance to view the rare Black Swifts nesting in their summer home. Can you see their nests camouflaged against the rock walls?"

I can't.

So Hirshman pulls out her red pointer light and points to a nest over there. I squint 'til I find the little red dot dancing on the canyon wall. Over her years of observation, Hirshman has given each nest in the canyon a number. This is Nest #7, a little bowl-shaped daub of grass and moss, tucked into a crevice.

"That's the most popular nest," Hirshman shouts into my ear over the waterfall's roar. But the nest is empty today, with no telltale urates on the cliff below, so we continue on our way, around a slight bend in the serpentine canyon. And suddenly, there's Box Canyon Falls, slithering through a slick rock tube, crashing 280 feet to the canyon floor.

It's hard to believe any bird would choose such a place to build its nest.

And yet, in Hirshman's 25 years of observations, she's spotted at least 35 different nest sites scattered throughout the canyon. Some mating couples seem to return to the same nest year after year. Other nests are occupied for a few seasons, and then abandoned for reasons that remain a mystery.

Hirshman has stories about each one — even the ones that have long since vanished.

There was that time she saw a Black Swift lay its egg. "I just happened to walk in, and the adult I was watching got real restless, just like a chicken, and then all of a sudden turns around and drops the egg into the nest."

Then there was that time she saw a mama feed a butterfly to its baby.

"I just happened to walk in, and the adult coming into Nest #1 had a butterfly in her beak. The chick gagged, like, 'What have you given me?' but finally got it down. I know it didn't like it."

Once, she saw a male Black Swift bring his mate a miniature bouquet.

"She was sitting on the nest, and he came back and he gave her a violet, a little purple flower. I swear to God I'm not making that up. A little purple violet," she tells me. "I thought, how tender is that? People won't believe that, but it's honest to God the truth."

She's pretty sure she's seen Black Swifts do it, right there on the canyon floor.

And as for that nest behind the waterfall, where that new walkway would go, "That one nest is one of my most popular nests," she says. "It is used about every year. It's not the best nest, but it's one of the best. I'm afraid if they open it up and people start going back there and taking pictures, the birds will say, 'Hey, we are not nesting there anymore.' It's gonna make them really nervous."

With only one chick per nest per year, every nest counts.

We reach the end of the metal walkway, and follow a flight of stairs down to a gravel beach on the canyon floor. The water thunders past us on its journey through darkness back toward day. We stand there for a moment and soak it all in.

Stringy-looking ferns sprout from crevices in the canyon walls. There's an old mining structure further down the canyon. Up above, the famous High Bridge stretches across the canyon, and above that, the infamous electrified "Box Canon" sign that city forefathers installed a century ago still attracts tourists to this spot. They've been coming here ever since.

It's easy to understand why. Standing in the waterfall's presence in the subterranean twilight is a soul-cleansing experience.

"Some people could care less about birds. But once you know about the Black Swifts, they will blow your mind."

— Sue Hirshman

"God, I love this place," Hirshman shouts over the static roar. The water swirls green in the grotto, and swiftly flows out of the canyon, as it has for a million years.

We retreat to a dry, sheltered spot further back inside the grotto. Hirshman eyes the Buddy Bench with ire. This is no place for humans to linger. She passes her binoculars to me to show me why.

Just a stone's throw away, hidden in secret shadows, is Nest #10, perhaps the most important site in the entire canyon, where researchers captured a healthy two-year-old male and outfitted it with a tiny geolocator in 2009 that helped reveal the secret of where the Black Swifts spend their winters.

New research conducted by Sparks and others over the past five years continues to yield astounding new insights into the Black Swifts' behavior.

Using small wing activity devices called accelerometers and GPS units (attached, remarkably, to the very same Box Canyon bird from the 2009 study, along with six others captured from other parts of Colorado), scientists have learned that Black Swifts remain entirely airborne for their eight-month non-breeding season, an incredible adaptation called "aerial roosting."

Nest #10 used to be occupied every year.

"This is probably the fourth year the bird hasn't come back," Hirshman shouts in my ear. "It might be that it didn't make it through migration. I don't know."

On the way out of the canyon, Hirshman wants to show me one last thing.

She shares the story of watching a genetically mutated leucistic chick hatch out of its egg. "And oh my God, was I excited," she says. "It was white on the head where it should be dark, white under the chin, white on the shoulder, with a streak of white on the back." >>>



Sue Hirshman, the guardian of the Black Swifts at Box Canyon Falls.

(Photo by Samantha Tisdal Wright)



Service will also join in the effort, visiting a handful of known sites on USFS land, using a targeted protocol so that everyone is counting in the same way.

The goal is to estimate density and abundance for the species in Colorado. “So it’s exciting,” Sparks says. “And at the same time, a little nerve-racking. Unfortunately, there’s a lot of logging and other things going on in the Amazon that likely impacts their survival.”

The global insect decline is equally concerning. “But we try not to think about it too much, and focus on solutions,” Sparks says.

Hirshman, too, has taken her place in a long line of Black Swift researchers who have contributed to the body of knowledge about this threatened species. Although technically a citizen scientist, she is well respected in the research community and was the lead author in a scientific article published in the *Wilson Journal of Ornithology*: “Breeding Phenology and Success of Black Swifts in Box Canyon, Ouray, Colorado.” A few years ago, she received an award for her work from the Bird Conservancy of the Rockies.

Hirshman isn’t able to get to Box Canyon as much these days as she’d like. She recently had to move to Montrose, 45 miles to the north — too far to make the drive every day. Even when she’s not in the canyon, her heart is with the birds.

“I try to protect them as much as I can, and educate people to let them know how special this bird is,” she says. “They only ask for a few months to lay an egg, raise their chick, and when they are here, they aren’t doing any damage to anybody. They just want to survive, like you and I.”

As we wander out of the canyon, Hirshman perks up at the sound of a bird call piercing the air: “*Sweet, sweet,*” it seems to say.

“Oh that’s a little cordy,” Hirshman exclaims. “The Cordilleran flycatcher.”

We pause at the big old Ponderosa that stands sentry at the top of the hill. “Last year the Tanager had a nest in here,” Hirshman says.

The air smells good, like vanilla, like summer. A steady stream of tourists flows past us, back into the canyon.

Will too much tourism destroy the Black Swifts colony at Box Canyon Falls? It’s one more question about this elusive species that remains unanswered. 

Later that season, she saw the leucistic fledgling leave the nest. “It was successful,” she says with satisfaction. Two years went by. “And then I came over here and as soon as I walked in, I just happened to look over at the wall and I about fainted because here is that same bird, but it’s an adult now.”

The grown-up leucistic Black Swift has since gone on to successfully mate and raise two chicks of her own inside Box Canyon. “It will be fun to see if she comes back again,” Hirshman says. “Shall I show you the nest?”

She hands over the binoculars.

“See the crack?” she says. “The nest is right there on the wall. See the crack here, the big crack, and it goes up and the nest is on that ledge. See where the light is shining? If you go to the left, she was right across from that nest.”

And sure enough, I see it. Not the nest. Not the leucistic Black Swift. Not any Black Swifts at all. Not yet. But there are fresh urates on the canyon wall. The birds are back.

When we get out of the canyon, well away from the waterfall’s roar, I finally ask Hirshman the question I came here to ask.

How are the Black Swifts doing? How are things going for them, now that the

climate (and everything else) is changing?

“Every year is different,” Hirshman sighs. “Last year I had seven chicks. And that was good. But the two years before there were only four. A good average is nine or ten. My numbers have been dropping. There might be other areas where there might be more. I don’t know. I doubt it.”

Three years ago, she says, something weird happened in the canyon. The egg from one nest disappeared without a trace. “There were three other nests that had eggs, and they were all smashed,” Hirshman says. With her strong midwestern accent, the word “egg” comes out with a long “a,” like “ache.”

“I don’t know,” Hirshman says. “Was it a crow or raven? The only thing I can attribute it to is a person. A gun? A BB gun? Three cracked eggs, and one gone. It’s a mystery.”

This summer, Rob Sparks is launching a new monitoring program for Black Swifts in Colorado, funded by Colorado Parks and Wildlife, that hopes to shed more light on how the swifts are faring.

He’ll be leading a team of three field biologists, who will visit 100 known and inferred nesting sites for Black Swifts across western Colorado (mostly near caves and waterfalls). Biologists with the U.S. Forest