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When Mountain Lions Are Neighbors

**PEOPLE AND WILDLIFE WORKING IT OUT
IN CALIFORNIA**

Beth Pratt-Bergstrom

Foreword By Collin O'Mara, National Wildlife Federation

WHEN MOUNTAIN LIONS ARE NEIGHBORS

SAMPLE CHAPTER

The National Wildlife Federation and Heyday gratefully acknowledge the individuals and organizations whose generous contributions made this publication possible:

WILDLIFE HEROES

Jon Christensen

Susan Gottlieb To my husband, Dan, for his amazing generosity and willingness to support Beth's important work.

David Crosby

WILDLIFE LEADERS

Furthermore: A Program of the J. M. Kaplan Fund

Dan and Debbie Gerber

Annemarie Hoffman I have firsthand experience of Beth's love for and commitment to pikas and all the other natural wonders of Yosemite. Any opportunity we have to create healthy respect for, and cohabitation and cooperation with, the animal world is a moment blessed with grace.

Jerald and Madelyn Jackrel To Rebecca, for the beauty she shared with us all.

Charles and Doris Michaels For Marty and Denali Schmidt, who loved nature, the mountains, and wildlife.

Jeremy Railton

Steve and Rosemarie Smallcombe

Jerry Voight and Jean Burke Fordis To Beth, whose commitment to protecting wildlife inspires us each and every day.

WILDLIFE FRIENDS

William Akel, Kathi and George Colman and Family, Faith Hershiser, Susan Mokolke, Gebhard and Liana Neyer, Wayne and Brooke Schick, Melani Smith, Kim Monday, Christine and Stephan Volker, Lynn Wells

Proceeds from the sale of this book directly benefit the NWF's wildlife conservation work in California.



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Heyday, Berkeley, California
The National Wildlife Federation, Reston, Virginia

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Library of Congress Cataloging-in-Publication Data

Names: Pratt-Bergstrom, Beth. | National Wildlife Federation.

Title: When mountain lions are neighbors : people and wildlife working it out in California / Beth Pratt-Bergstrom.

Description: Berkeley, California : Heyday ; Reston, Virginia : National Wildlife Federation, [2016] | Berkeley, CA : [Distributed by] Heyday

Identifiers: LCCN 2015043694 (print) | LCCN 2015044823 (ebook) | ISBN 9781597143462 (pbk. : alk. paper) | ISBN 9781597143486 (kindle)

Subjects: LCSH: Wildlife habitat improvement--California. | Wildlife conservation--California. | Human-animal relationships--California. | Urban animals--California. | Suburban animals--California. | Wildlife crossings--California.

Classification: LCC QL84.22.C2 P73 2016 (print) | LCC QL84.22.C2 (ebook) |

DDC 333.95/409794--dc23

LC record available at <http://lcn.loc.gov/2015043694>

Front cover photo: Steve Winter. View his work at www.stevewinterphoto.com.

Back cover photos from top: Rebecca Abbey, Karl Frankowski, Steve Winter, Robert E. Riggins, National Park Service

Book design: Rebecca LeGates

Poem on page 41 ©2016 Nick Asbury, used with permission.

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(510) 549-3564, Fax (510) 549-1889

www.heydaybooks.com

Printed in East Peoria, IL, by Versa Press, Inc.

FOR P-22



P-22 roaming Griffith Park in 2016.

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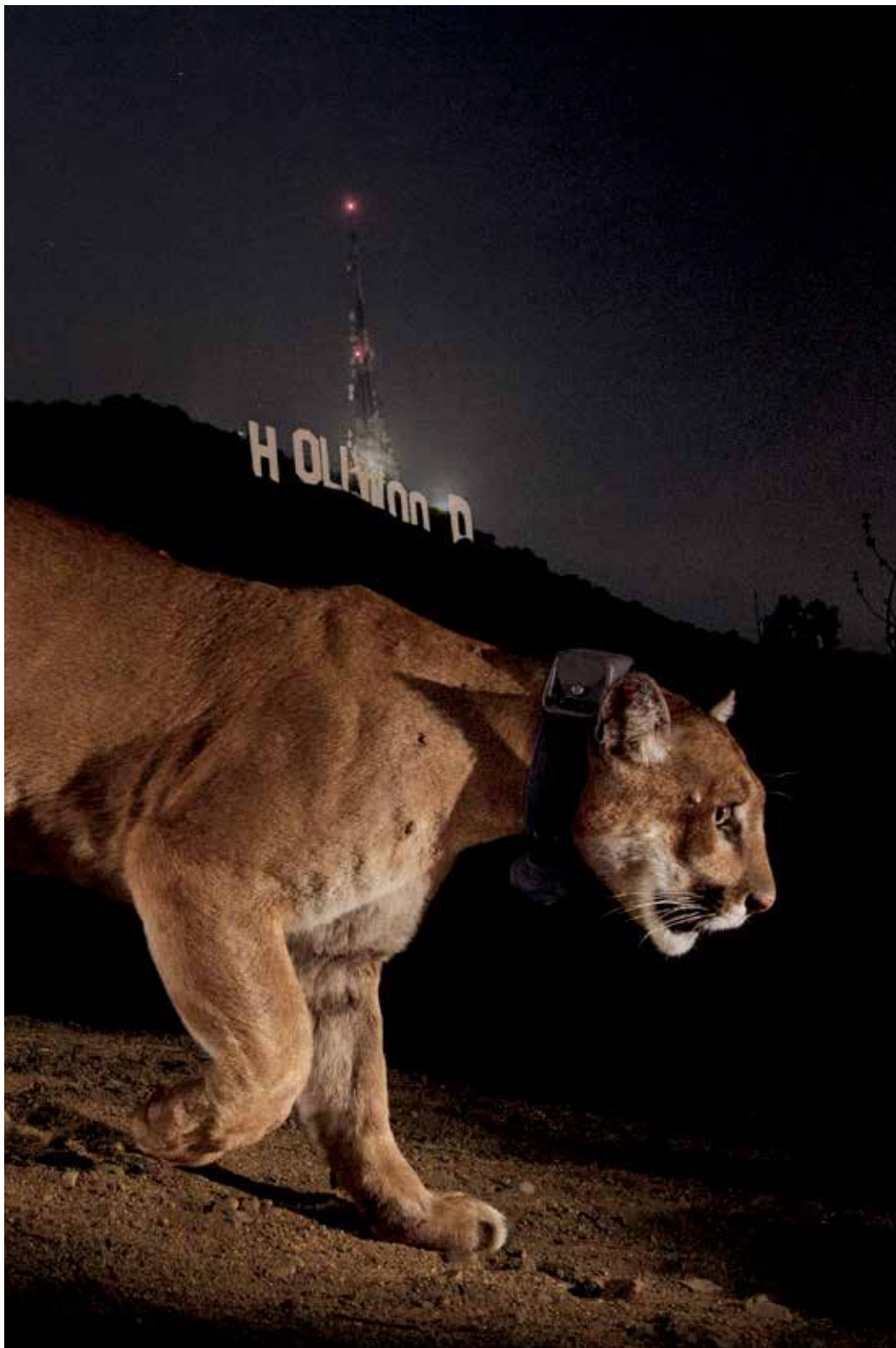
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Steve Winter's famous photo of P-22 in front of the Hollywood sign.

CHAPTER 1

A Mountain Lion in Hollywoodland

**CAN PEOPLE AND WILDLIFE COEXIST
IN THE SECOND-LARGEST CITY IN THE NATION?**

“The mountain lions have not learned, like the wolf, to get the hell off the land....They have an odd, powerful dignity that does not understand the endless catches and snags of the human race. That is why they are still at the fringes, still fighting.”—Craig Childs, *The Animal Dialogues: Uncommon Encounters in the Wild*

“All this talk about #sharkweek. Whatevs. Call me when a shark moves into a huge park in the middle of a city.”—@P22MountainLion, a P-22 Twitter account

Imagine the second-largest city in the country asleep. Or if not asleep, as close as the City of Angels will ever come to slumber. The dark obscures the city’s own north star—the forty-five-foot-tall letters of the Hollywood sign—and a parade of club-goers cruise home along Sunset Boulevard, some making one last stop at In-N-Out Burger before being swept up in the unrelenting pulse of highway traffic. This is, after all, the city that termed a weekend freeway closure “Carmageddon.”

For the metropolitan area of Los Angeles, home to almost thirteen million people, the deep hours of the morning provide as quiet a time as it ever experiences. The Spanish named the hours between midnight and dawn *madrugada*, a time when most of us are lost in dreamland. But one would-be resident of Los Angeles is awake and alert. He strolls through the magical time of the *madrugada* thinking not of fame or riches but something far humbler: deer.

This newcomer is a mountain lion.

A relative youngster at two years old, P-22—as he will soon be known to the world—heads east toward the city, having probably come the twenty miles from Topanga State Park in the Santa Monica Mountains. He walks regally, muscles rippling beneath his tawny coat, that unmistakable long tail twitching at times. His

leaving home, called “dispersal” by biologists, marks a typical milestone for a cougar at his age, as young males must seek out their own territory. The Santa Monica Mountains house plenty of deer, but those deer can come with a high price if located in the established home range of another male. Cougars can fight to the death over territory, and a teenager like P-22 knows he is no match for an older, more experienced cat.

Finding unclaimed space that includes a deer herd within a wilderness squeezed on all sides by a megalopolis can prove to be challenging. P-22, however, fully utilizing the stealth that he has inherited from his ancestors over millions of years, saunters unnoticed through the neighborhoods of Bel Air and Beverly Hills, his paws leaving impressions on the impeccably manicured lawns.

Mountain lions evolved in the Americas and, unlike their cheetah cousins during the last ice age, did not venture across the Bering Land Bridge to Eurasia in search of food. Why? Some scientists have theorized that they were reluctant to follow their kin because they are “ghost cats,” averse to open areas and plains. So perhaps we owe the unique presence of this top predator to a case of collective agoraphobia? That evolution has shaped one of North America’s largest carnivores into a shy, introverted, and enigmatic creature is not without its irony, as Craig Childs notes in his book *The Animal Dialogues*: “So now the biggest, most dangerous animal is also the quietest and the hardest to see.”

Yet given the elusive nature of cougars, why does P-22 chart a course into the most crowded area in the United States?

Scientists will provide a basic answer: he is searching for an unoccupied space with food. While this explanation is not technically wrong, it seems too simplistic to reduce P-22’s journey to a routine trip to the grocery store; something else must be at play in this adventure, something beyond the need to escape the wrath of other lions and to answer the demands of the stomach. There are easier ways to secure deer than to march into the middle of Los Angeles.

As P-22 wanders through the neighborhoods featured on Maps of the Stars—possibly stopping to nap among the oak trees at the Mountain Gate Country Club, its members teeing off unaware that a 120-pound cat dozes within swinging distance—what guides him? What urge keeps him heading east despite the constant human presence he encounters? How does he know his own personal deer park—where he can reign like a medieval ruler—exists miles away, past the maze of congested streets, past the hillsides with every inch of green blotted out by seemingly endless sprawl?

Maybe P-22 is following the abundance of deer trails—invisible to us—that crisscross the subdivisions and golf courses. Perhaps the revived flow of the Los Angeles River, slowly being daylighted after having largely been buried in concrete for fifty years, is once again singing the promise of prey and enticing a top predator into the city limits.

Scientists warn us about anthropomorphizing, but if we share 92 percent of our DNA with a mouse, it seems ridiculous to keep asserting that animals operate solely on instinct and nothing more. Dolphins recognize themselves in mirrors, rats display empathy, and elephants hold funerals to mourn their dead. Would it really be a stretch to say P-22 possesses a sense of adventure?

Researcher Kerry Murphy, who has logged countless hours observing cougars, told Chris Bolgiano, the author of *Mountain Lion: An Unnatural History of Pumas and People*: “What’s impressed me most is their individuality. Each of them has a life that’s as real to them as ours is to us.”

P-22 just may be the Neil Armstrong of his kind. A quick glance at his route on a map shows he had to be a bit mad to even attempt his journey. To get to his new territory of Griffith Park, he must cross two of the busiest freeways in the United States.

Imagine soft, padded paws fitted for bounding over snow and boulders touching the asphalt of the first eight-lane highway, known as one of the worst roads in the country. Even in the



P-22's journey to Griffith Park took him across two major freeways.

middle of the night, the 405 never slows, and the highway thrums with mechanical noise and explodes with the mad dance of headlights. When faced with the living, breathing monster of the 405, most cats do an abrupt about-face, or get mangled by a few tons of moving steel. But P-22, with his tenacity, or luck, or both, somehow manages to cross. There is no way of knowing how he navigates the formidable obstacle of the road, whether he uses an under- or overpass or bolts straight across. All have been attempted by other cats, and many haven't lived to tell the tale.

My guess? He probably did what most of us do when confronted with the Los Angeles freeways: floor it and hope for the best.

Imagine that bound! One large step for cougarkind. Mountain lions can jump a span of forty-five feet. Someone might have seen P-22, startled by the view of him dashing across the road in a blur of maniac motion, but since mountain lions are not a usual reality for the LA motorist, that long tail or autumn-brown coat in the headlights was probably attributed to a large dog.

His miraculous feat, however, only pushes him into more densely populated areas, where he must keep going, perhaps thinking to himself he has hit the point of no return. I imagine his final miles as akin to a thirsty man wandering in a desert, hoping for signs of water with every step. Then, like a mirage, the Hollywood Hills appear, a green expanse filled with deer. Even more importantly, he senses no indication of another male lion. Cougars leave scent marks of urine or feces, or scrapings on trees, to designate their territory and warn other lions to keep out.

One last push. He might stand on the Mulholland overlook at night, gazing at the city lights of downtown to the south and the lack of lights on the landscape due east, another promising sight. He might consider his options for crossing the 101, peeking out of his hiding place while he rests during the day, smelling the heavy stench of gasoline and exhaust, the noxious perfume of the freeways. Perhaps he's also curious about those giant white letters jutting out of the hillside.

P-22 somehow navigates the 101, ranked by some as the worst commute in America. He might pause a moment with a triumphant look back at the speeding cars, then pick up his pace for the last half mile to his destination, sauntering through the winding roads and quiet neighborhoods, taking note of the Hollywood Reservoir, a place he will soon frequent. If cougars feel relief, I am sure P-22 does at this moment. No houses. No other male cougars. Plenty of deer. #winning

And then he creates a marking as significant in the cougar world as the famous boot print on the moon: he scrapes a tree with his claws, forcefully and with much satisfaction, and claims Griffith Park for his own.

“On February 12, 2012, at 9:15 p.m., we collected the ultimate evidence...The discovery of this mountain lion remains one of my proudest moments as a wildlife biologist and as an Angelino who grew up on the edge of Griffith Park.”—biologist Miguel Ordeñana

Griffith Park represents a small fraction of a normal home range for a *Puma concolor*. An adult male can occupy up to 250 square miles; P-22 somehow makes do with 8—the smallest home range ever recorded for an adult male mountain lion. His incredible journey of dodging semitrucks and sneaking through country clubs inspires awe, but his ability to survive like a castaway stranded on an island surrounded by an ocean of city ranks in the category of incredible. And for P-22 there is not much hope of a rescue boat. He’ll have to swim through more traffic to escape.

At more than four thousand acres, Griffith Park ranks as the nation’s largest municipal park that houses wilderness. It is a hybrid of city and nature surrounded by a spider web of freeways, only two miles from the Hollywood Walk of Fame. Ten million people visit the park annually, more than double the visitation to Yosemite and Yellowstone. Within its borders they can play a round of golf or a set of tennis, visit the famous Griffith Park Observatory, attend concerts at the Greek Theatre, ride the historic merry-go-round or miniature train, cheer on youth soccer or baseball, take their kids on pony rides, canter their horses along the equestrian trail, and picnic, hike, bike, or run.

A Nicaraguan American who grew up in LA, Miguel Ordeñana spent his childhood playing hide-and-seek among the oak trees and hiking with his family up to the Hollywood sign (when you still could). Grown-up Miguel is one of those quiet and unassuming individuals whose calm manner should not be mistaken for

a lack of passion or ambition. He has studied bats in the Mojave Desert and jaguars in Nicaragua, proof that a childhood in the heart of a large city can still foster a love of wild things—or, argued another way, proof that nature does exist in Los Angeles despite our best attempts to banish it. “Griffith Park was my first wilderness,” he says. “I didn’t know the difference between that and a Yosemite. Now I know the difference doesn’t matter, at least to a kid discovering nature. Griffith Park is more accessible and just as meaningful.”

Miguel’s employer, the Natural History Museum of Los Angeles County, has a mission to dispel the notion that LA is an urban wasteland, instead promoting the city as a wildlife hotspot. This quest isn’t as improbable as it sounds. With more than five hundred avian species recorded in the county, Los Angeles ranks as “the birdiest county in the United States,” and its diverse geography of ocean shoreline to mountain peaks houses an immense range of biodiversity. But the museum’s initiative is not just about gathering anecdotal superlatives—it is conducting the world’s first and only long-term study of urban biodiversity.

The museum’s new interactive and technologically sophisticated Nature Lab and Nature Garden celebrate the city’s urban wildlife through video games, real-time mapping, an “opossum cam,” and an outside habitat complete with raptors, dragonflies, and raccoons—wildlife liberated from the stuffed-animal dioramas of the past and reimagined for the younger generation. This is wildlife for the social media age: coyotes in video games, live critter cams, and people taking selfies with rattlesnakes.

As part of the Griffith Park Connectivity Study, Miguel is a member of a team that includes Erin Boydston (US Geological Survey) and Dan Cooper (Cooper Ecological Monitoring, Inc.) and that collaborates with Laurel Serieys (a PhD student at UCLA and founder of the website *Urban Carnivores*). They have contributed to a long-term study, led by National Park

Service biologists Seth Riley and Jeff Sikich, on the impacts of urbanization on cougars, bobcats, and other wildlife.

Miguel has monitored wildlife movement between the park and the Santa Monica Mountains to the west since 2011. For most of Griffith Park's history, the city managed it almost entirely for the needs of human recreation, and not until 2007, long after some native plants and animals had already gone extinct from the area, did anyone conduct a formal survey of its biodiversity. Local residents, such as Friends of Griffith Park founders Gerry Hans and Mary Button, became tired of the inattention paid to the park's flora and fauna and decided to do something about it. "We wanted to give the wildlife a voice before it all disappeared," Gerry said. They helped fund the connectivity study, key to the future of the coyotes, deer, bobcats, foxes, and other wildlife marooned on the island of green. By using remote cameras, the team investigates how wildlife navigates (or doesn't navigate) the barriers that surround the park, and this includes monitoring crossing sites along the 101, 5, and 134 freeways.

Remote cameras are an important dimension to wildlife field research, as they are allowing scientists to witness behavior that either would have never been observed or would have required thousands of hours of field study to understand. In fact, given P-22's ancestors' gift of stealth, without this new technology the big cat might have roamed in Griffith Park for years without anyone knowing it.

The job title Wildlife Biologist sounds romantic and exotic—visions of Jane Goodall hugging chimpanzees come to mind—but in reality it now involves a significant amount of time staring at computer screens. For the Griffith Park crew, sorting through the thousands of photos acquired each month from the remote cameras can be a tedious job. In February of 2012, while flipping through yet another batch, Miguel, fatigued with the flow of coyote and deer images, clicked the mouse in autopilot mode.

Coyote, coyote, deer, squirrel, cougar...



A portrait of P-22 in November 2014.

Cougar? That jolted him out of his boredom. Were those the hindquarters of a mountain lion?!

As Miguel remembers, “I gasped and stared for a while, astonished at the size of the animal’s tail, body, and paws. I went through the photos again...trying to see if my mind was playing tricks on me—maybe it was just a Great Dane that got loose late at night that had stood very close to the camera. But I immediately knew what it was. Then I thought, ‘You should probably call somebody.’”

Miguel called his partners on the Griffith Park study and the National Park Service biologists and left a series of excited and frantic voice messages on their cell phones. Receiving the news of a cougar in Griffith Park was akin to hearing they had won the lottery. Though all of these scientists could probably be studying wildlife in more exotic locales like Yellowstone or South America, they have become enchanted with urban wildlife and dedicated their work to ensuring that it thrives in LA.

The researchers are the sort of people I like to hang around. They keep dinner conversations lively with their tales of gruesome scavenger hunts for carcasses, performed to monitor the diets of carnivores. You can't help but have an affection for people who get excited about things like disemboweled raccoon remains and the dissection of bobcat poop. When Miguel and Laurel stumbled upon evidence of P-22 eating a coyote, their exuberance clearly showed in the blog post Miguel published about the discovery—"What's on P-22's Menu"—complete with the gory photos. One line reads: "Laurel shouted out to me with excitement!!! 'It's a coyote!!'"

What is on P-22's menu? many ask, either out of fascination or fear. For the answer, we can thank these devoted researchers, who bushwhack through dense chaparral and poison oak in order to kneel beside pungent rotting meat for insight into the cougar's palate. What the National Park Service study has told us to date is that you can take the mountain lion out of the country, but you can't take the country out of the mountain lion. P-22 eats almost exclusively deer, and the team has found no evidence of his making a meal out of a house pet. As Miguel observes, these results "dispel myths about urban mountain lions seeking out pets or becoming dangerously habituated to human-subsidized food resources. P-22 is retaining the same natural behavior of his more rural counterparts and going after deer and other natural prey in the wildest patches of the park."

If deer can be said to possess a nemesis, it's the mountain lion. All of its muscle and might are dedicated to the pounce and takedown of deer, and a cougar's "lithe and splendid beasthood," as described by wildlife author Ernest Thompson Seton, seems wasted on smaller prey. Considering the energy required to make a kill, a raccoon or a house cat is hardly worth the lion's effort.

When deer are scarce, however, cougars are opportunistic killers, especially since they can't nibble on berries or acorns. Unlike coyotes or bears, a mountain lion is a true carnivore and rarely,

if ever, consumes vegetation, as its digestive system rejects it. In the animal's ongoing quest for meat, evolution has provided the right tools for this highly specialized ambush predator. Powerful haunches propel a cougar into leaps of up to fifteen feet and can launch short sprints up to forty miles per hour. Even the teeth—canines that can grow as long as an inch and a half—possess a secret weapon: an abundance of nerves to help the cat sense when it has penetrated the precise kill point.

Faced with this formidable predator, the deer have two defense mechanisms: running and hiding. Deer in Griffith Park must have made for an easy meal at first, as many of the prey animals in Griffith Park had entirely forgotten the long-absent predator. P-22 quickly reawakened their memory. He kills about three or four deer a month, and the evidence of his carnage signals to the researchers a promising development. As Miguel points out, “These grisly scenes also may provide a sign of hope for Griffith Park remaining a functional urban oasis”—meaning the appearance of apex predators like mountain lions are a good indicator of the overall health of an ecosystem, sort of nature's thumbs-up that all systems are a go.

To call the park an oasis, however, implies it is a way station, a place where a weary traveler can stop and refuel before moving on. P-22, unless he attempts once again the perilous journey across LA's freeways, has nowhere to go. Although the all-you-can-eat deer buffet might be able to sustain him indefinitely, his solitary existence may not.

P-22 needs a mate. And for that he must travel.

“In addition to her youth, good looks, independent spirit, love of the great outdoors, and proven ability to bring home the bacon, P-23 does not appear to be related to P-22. So what’s keeping these would-be soul mates apart? The 405. Yes, the east/west LA divide has defeated many a romance before, but knowing what we do about these two, we think they can defy the odds. Go get her, lion! (But safely, please.)”—Shayna Rose Arnold, *Los Angeles Magazine*

P-22 has won over the heart of Los Angeles. Reporter Martha Groves of the *LA Times* first broke the story, and the lion has been a media darling ever since. He has his own Facebook page (“P-22 Mountain Lion of Hollywood”) and several Twitter accounts, where he tweets requests for good restaurants serving “raw meat and hikers,” bemoans the perils of the 405, and claims he ate former city council member Tom LeBonge. His bachelor status rallied Angelinos to his plight, and he might be the first cougar in history with a dating site and an entire city playing matchmaker. When a photo of P-23, a young female cougar, taking down a deer on Mulholland Highway went viral on social media, many a blogger, like *Los Angeles Magazine*’s Shayna Rose Arnold, thought she had found P-22’s ideal mate.

Biologist Jeff Sikich is also concerned with P-22’s love life, though his interest as a National Park researcher relates more to genetics, inbreeding, and connectivity issues than romance. He and Seth Riley, the foremost expert on urban carnivores, have collaborated on a long-term cougar study in the Santa Monica Mountains National Recreation Area since 2002.

Tracking and studying lions in Los Angeles—and beyond—is Jeff’s occupation. He has built an impressive resumé that includes studying big cats in the Peruvian Amazon, Indonesia, and South Africa, and scientists all over the world fly him to their locales so they can learn his “safe capture” technique for big cat

research—modified padded foothold cable restraints that send immediate text message alerts to the scientists monitoring the traps. As the *LA Times* said in a profile, “Sikich’s instincts in the wild and his humane captures have earned him a place among a cadre of go-to carnivore trackers.” Yet despite his global renown, his heart remains with the Los Angeles lions.

When I first meet Jeff, he stands in a grove of live oak on the edge of a parking lot adjacent to the famed Griffith Observatory. In the movie of P-22, Jeff would play himself, as his rugged good looks and affable, humble manner perfectly fit the casting call of “hero biologist.” People casually walk or jog by, consider the decidedly science fiction–like radio antenna he’s holding in his hand, and either pass it off as another Los Angeles eccentricity or a scene being filmed for a movie, a sight to which Angelinos are largely indifferent unless someone with real star power is involved.

Some passersby, however, are curious enough to ask what in the heck he is doing.

“Tracking a mountain lion,” he replies.

Probably not the answer most expected. Of those who inquire, not a single person—even the woman walking two adorable but vulnerable corgi dogs—expresses fear. Responses range from “Cool” to “Wonderful that he is here” to “Can I see him?”

Public relations is part of the job when you are studying lions in a city of millions, and Jeff is a gracious and witty spokesperson for cougars. People truly want to know more about this cat, from his height and weight to their likelihood of being mauled. And without Jeff’s talents, we would not know enough about P-22 to answer these questions. He’s the one who captured the cat and fitted him with the radio collar that tracks his movements. He is also the one who named him. Although some advocate for what they consider a better moniker (a recent contest elicited suggestions including Pounce de Leon, Griffy, and Puma Thurman), P-22 appears to be growing on people. As part of a numbering system for tagging animals, P represents “puma,” and 22 denotes

his sequence in the number of cats that have been tracked in the Santa Monica Mountains.

Jeff has spent intimate time with P-22 on multiple occasions. When a failed GPS device necessitated his recapture, Jeff, quite remarkably, simply snuck up on the cat. After picking up residual transmitting signals, he spotted P-22 crouched in a ravine, at which point he climbed an overhanging limb and darted the cat with tranquilizers from ten feet away. “He knew I was there and made no move to attack,” he recalls. “He was probably hoping his strategy of concealment would keep working. This shows you the lengths these cats will go to avoid a human encounter.”

In the world of cougar research, captures are usually made with hounds treeing an animal, then the researcher tranquilizing it. In an urban area, however, you can’t have dogs chasing a cougar into someone’s backyard gazebo or up their apple tree. Jeff improved upon an existing solution—the padded foothold method—which lures the animal into the trap usually by playing a recording of a female in heat or a deer in distress. Once the animal springs the trap, the system issues an immediate text message to researchers, minimizing the animal’s time in the padded foothold. The technique isn’t foolproof, and there is no question that using the hound method, along with cage traps—both of which he does whenever possible—would make Jeff’s life easier. As he puts it, “This is an animal that can roam 250 miles and we’re trying to get him to step into an area the size of a dinner plate.”

Once, when Jeff needed to replace a failing collar on the cougar known as P-10, he tracked the cat to his hiding place in a bushy area right outside a garage in the residential area of Pacific Palisades. He knocked on the door, assured the homeowner that she “had no reason to be alarmed,” and then informed her a mountain lion was napping in her yard. “Do whatever you need to do,” she responded. “I love kitty-cats.”

After Jeff blow-darted P-10 with tranquilizers and took the animal’s measurements, the homeowner brought him a sandwich



The world's most famous mountain lion, P-22, coughing up a hairball.

and a cold drink. He then allowed her and a neighbor, Bill Fado, to get a photo of the tranquilized cat. Bill recounted the once-in-a-lifetime experience in the *Palisadian-Post*: “As I watched P-10 slowly walk away from us, occasionally looking back, it brought to mind images of the plains of Africa. Then he was gone, or so we thought. Suddenly, there he was, 50 feet away looking right at us. He stared at us for 10 seconds as if to say, ‘Thanks for getting me out of that jam,’ then turned away and went off into the night. It was a mystical experience that I will never forget.”

Mountain lions in neighborhoods make for good stories, but they prove to be the exception to the rule. What Jeff and Seth’s research demonstrates is that for all their urban living, cougars actually don’t like to spend much time near people. Of the more than thirty thousand GPS readings from the first eight cats in their study, 98 percent occur in natural areas and two-thirds register greater than a kilometer away from urban spaces. So it’s likely that even if P-22 kills a deer near a house or a high-use recreation area, he will hide or cover it as cougars typically do, then retreat for

the day to a remote part of Griffith Park until he can return for solitary midnight snacking.

Snacking is his main business. As Jeff jokes, “He’s spent his time like Rocky. Getting in shape, fattening up. If this was a normal situation, he would probably go somewhere to challenge a male or take over a dead male’s territory.” But so far, P-22 has been content to stay put, with only occasional forays into the neighborhoods surrounding Griffith Park, such as when he was discovered napping in a crawspace in the Los Feliz home of Jason and Paula Archinaco. “We have three cats, and I don’t see why we can’t make room for one more,” Paula told the press—because of course there was press for a Hollywood celebrity of his caliber. The resulting media circus, complete with a live feed of the cat peeking out at the cameras and helicopters buzzing the neighborhood, made headlines around the world. (*Time* magazine announced: “The Mountain Lion that Was Hiding Under a Los Angeles Home Has Left.”) The media spectacle was not born of fear, however; for the most part, people just wanted a glimpse of the famous cat.

As P-22 has proven, we don’t need to unthinkingly fear mountain lions. Even when trapped in the crawspace, surrounded by a crowd of people, and having tennis balls air-gunned at him in an attempt to haze him out of the house, he made nary a threatening move. As to his harming a human, Jeff underscores that attacks by cougars are very rare; the chance is about one in twenty-five million. You’re more likely to win the lottery or be struck by lightning than be killed by a cougar. “These are large carnivores capable of attacking people, and they deserve a healthy respect,” Jeff says, “but clearly mountain lions don’t think of people as prey, and this is good news for both people and lions. If they wanted to eat us, they would.”

Jeff goes on to say that in Los Angeles, for both P-22 and people, the freeways pose the greater risk. In Los Angeles County alone, automobiles cause on average about 750 deaths and 85,000 injuries each year. In California, mountain lions have attacked

fewer than twenty people and killed just three since 1986, according to the state's Department of Fish and Wildlife. These statistics don't diminish the tragedy when a person is killed or injured by a lion, but it puts the risk in perspective. Living in lion country is much safer than living in car country.

The automatic fear—and the killing of cats that simply appear on the urban landscape—is usually due to a lack of education, not maliciousness. If you're not a carnivore biologist and accustomed to mountain lion behavior, then a hissing, snarling, 130-pound cat can easily lead to a state of panic. Simply learning about normal lion behavior would help dispel some of the fright and help people realize that the majority of encounters with lions end without incident. As the California Department of Fish and Wildlife's Lt. Kevin Joe notes: "Just because you find a mountain lion behaving normally, but in an unusual location, it doesn't mean it's a threat to public safety."

How long can or will P-22 keep up this duck and cover, this solitary and stealthy existence in the middle of LA, before he gives up his home for the urge to mate? During one of our drives around Griffith Park, I asked Jeff about P-22's options. Is it possible he might remain a bachelor forever and just stay where he is? Jeff considers it. "This cat has already done things we've never seen, so anything is possible," he says.

The other scenario many have proposed—for the safety of both the lion and his human neighbors—involves relocating P-22. Jeff appreciates the sentiment and the logic behind the idea yet doesn't believe it's a good option. "Rarely is relocation successful for males," he says. "The lion might just come back or get killed doing so. You are dropping a cat into unfamiliar territory and probably forcing an encounter with an older or more experienced lion, which usually results in the death of one of the males."

But the more likely outcome—that he heads out on his own—probably won't produce a very happy ending either. "I don't know what will happen if he leaves," Jeff says. "He did find a safe way

across once, but chances are slim that he will make it past the freeways again.”

People are genuinely concerned for P-22’s safety. When staying in Thousand Oaks for a briefing about the National Park Service’s mountain lion study in the Santa Monica Mountains, I arrived very late to the hotel, and an obviously bored but very friendly night clerk checked me in. She gave me directions to the nearest Starbucks, then asked why I was in town. I told her the story of P-22 living in the middle of Los Angeles. She looked at me, fear-stricken for a moment. I prepared to launch into my usual speech about how you are more likely to be struck by lightning than attacked by a mountain lion when she said, “He’s safe there, right? No one is going to hurt him?”

This affection for mountain lions isn’t cursory. If you live in California, the odds are almost fifty-fifty that you live in mountain lion habitat. In 1990, California residents passed Proposition 117, known as the California Wildlife Protection Act, which reclassified the lion as a “specially protected mammal” and banned the hunting of lions in the Golden State—this even though mountain lions are neither endangered nor threatened in most of California. California is the only state to date that has banned the hunting of lions. Admittedly, not every resident of the Golden State expresses awe and wonderment at seeing the trademark flick of a cougar’s tail, yet even the rare attack does not deter the unwavering support of the majority, who enjoy having cougars on the landscape. P-22 prospering in Hollywoodland serves as just one example of Californians’ affection toward the cat.

Unlike in most of the state, the cougar population in the Santa Monica Mountains is imperiled. The survival of P-22, and indeed the survival of all the cats in the Santa Monica Mountains, largely depends on one factor: connectivity. Translated into non-biology terms, they need to be able to get across freeways and roads from one natural area to another. The superintendent of the Santa Monica Mountains National Recreation Area,

David Szymanski, started a public briefing about P-22 reinforcing the need for vital linkages: “If the lion didn’t exist as a poster child of the importance of connectivity of open space, we would have to invent him.”

As much as we like to play matchmaker for P-22 and impose our thoughts of romance upon him, the biologists are not so much concerned about his loneliness as they are invested in his role in increasing the genetic diversity of the lion population. Inbreeding leads to birth defects, such as kinked tails, weak spines, and single testes, and the fewer viable males you have in a population, the faster it implodes. With animals unable to reliably cross highway barriers, and automobiles taking out most who even try, the cats of the Santa Monica Mountains display some of the lowest genetic diversities of a lion population in the West. The researchers look to the almost extinct Florida panthers as a low bar they do not want to reach. Ultimately, if these cats can’t move and find mates from other areas, the entire population is at risk, not just the charismatic P-22.

“The Santa Monica Mountains alone just cannot support a viable mountain lion population. There just isn’t enough room,” says Seth Riley, Jeff’s partner in research. Yet he is optimistic. “Personally I am hopeful despite the challenges. They continue to survive naturally. But landscape connectivity is key, and it’s pretty darn bad right now across the 101.”

Seth is one of the leading experts in the science of urban cougars and other wildlife, and he literally wrote the book on the subject (*Urban Carnivores*, with coeditors Seth Riley and Stanley Gehrt). He becomes animated when he talks about what he considers the ultimate goal of his and Jeff’s research: a wildlife crossing along the pinch point they have identified on the 101 at Liberty Canyon, a key passage for mountain lions and other animals. “This is a vital crossing in one of the last undeveloped areas on the 101, and building a safe passage gives us a chance to ensure the future of the cougars—and all wildlife—in the Santa Monica Mountains

and Los Angeles area,” he says. Seth’s research has also shown that an array of wildlife—even smaller creatures like salamanders—are impacted by these paths.

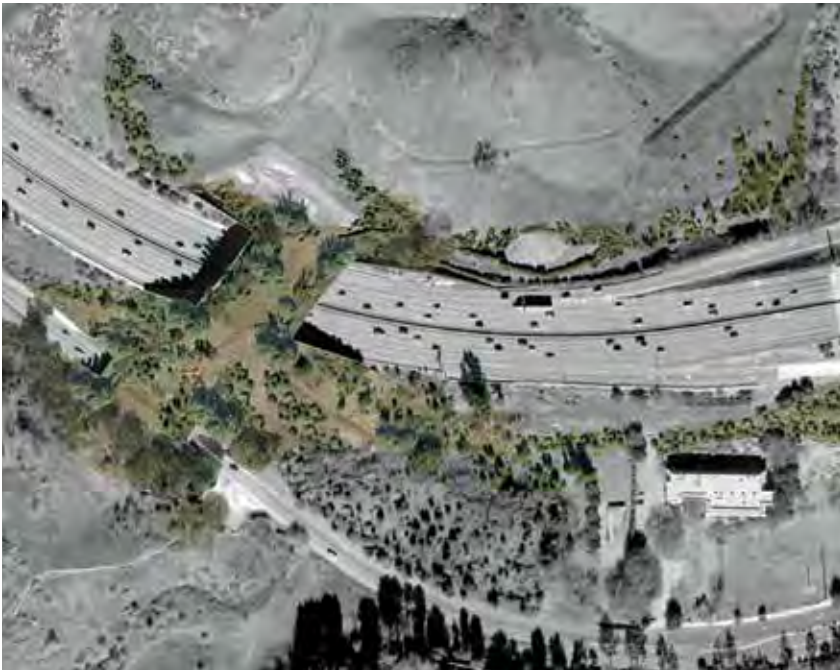
Jeff and Seth took me on a tour of the site and pointed out where the crossing would be located. We hiked up a hillside and from our vantage point could easily see the undeveloped land funneling toward the highway on both sides into an animal dead end. I imagined a bridge stretching across the 101, and the first tentative footsteps from a bobcat or mountain lion, or even a salamander. It’s a massive undertaking that comes with a price tag in the tens of millions, and public support is essential. Christy Brigham, the National Park Service’s chief of resources, underscores this last point: “We are not going to be able to keep lions in the Santa Monica Mountains unless we all think it’s a good idea.”

P-22 probably also stands on a hillside at night considering his options to leave Griffith Park. He’s lived here since 2012, and is long past the age a mountain lion settles down. His fate is uncertain. He might decide to remain a bachelor and spend the remainder of his days in the city. He is still vulnerable to human threats, like poison exposure (see page 29) or being hit by a car. His allegedly having made a meal of one of the Los Angeles Zoo’s koalas in March 2016 prompted some calls for his relocation, but supporters rallied against his eviction. Even the zoo itself has been forgiving; a headline in *The Washington Post* read “L.A. Zoo to the mountain lion that probably ate its koala: No hard feelings.” He might view with longing the mountains of the Angeles National Forest, less than ten miles away as the crow flies, nothing much for a cat used to traveling twenty-five miles a day. But even the most direct route would entail crossing the 5 and two other freeways, and traversing the city streets of Burbank or Glendale.

When I ponder the plight of P-22, I conjure up an image of Los Angeles shutting down for a day. I picture the cat sensing the unprecedented quiet, sensing that the monotonous noise of the cars has ceased, and then sprinting up Highway 5 with onlookers

cheering his progress. (Is a ticker tape parade too much to add to the fantasy?) They watch as he heads north, perhaps as far as Los Padres National Forest, where he could lose himself in the almost three thousand square miles of protected areas and leave his freeway-cruising days behind him.

Now, shutting down freeways is unrealistic, but building a bridge for cougars and other wildlife is not. The Liberty Canyon Wildlife Crossing is becoming more of a reality with the launch of the National Wildlife Federation and its partners' #SaveLACougars campaign, which has rallied thousands to work toward the bridge's completion. P-22 has largely inspired this effort. Building the largest wildlife crossing in the world in the most densely populated urban area in the United States would send a message to the world. For a city that has long been the poster child for environmental degradation, P-22 could be the tipping point, and a chance for redemption.



One proposed alternative for the Liberty Canyon Wildlife Crossing, by senior architect Clark Stevens, of the Resource Conservation District of the Santa Monica Mountains.

“Then it suddenly occurred to me that, in all the world, there neither was nor would there ever be another place like this City of the Angels. Here the American people were erupting, like lava from a volcano; here, indeed, was the place for me—a ringside seat at the circus.”

—Carey McWilliams, *Southern California Country* (1946)

In 2013 Kathryn Bowers, coauthor of the provocative and fascinating book *Zoobiquity: The Astonishing Connection between Human and Animal Health*, invited me to speak on a panel for Zócalo Public Square called “Does LA Appreciate Its Wild Animals?” Just a few years ago, my answer to that question would have been a resounding no.

Los Angeles didn’t come natural to me, as I suppose it doesn’t come natural to most of us. I have since changed my mind, and my conversion nearly echoed that of Carey McWilliams in the 1940s. He shares in his book *Southern California Country: An Island on the Land* that the city at first appalled him. But then, after developing a begrudging respect over time, he suddenly realized he wanted to be a part of this explosion, the new, emerging “lovely makeshift city.”

For me, a young girl who yearned to live and work in national parks and then eventually achieved that dream, I once considered Los Angeles an abomination, a place that, as author William Deverell described, “willed itself by shoving nature around.” It was P-22 that lured me and P-22 that allowed me to see LA in a new way. If LA’s version of nature is good enough for P-22, then who am I to judge? If the city can support a 120-pound predator, it can also provide homes for foxes, bobcats, birds, insects, reptiles, and amphibians.

Miguel Ordeñana agrees: “It didn’t take me too long to recognize the scientific and conservation significance of P-22’s story, and the media coverage helped me learn that he was going to

be a special ambassador for Griffith Park, LA wildlife, and urban mountain lion conservation. Knowing that there is a mountain lion in LA's most popular and accessible park provides a bold statement that there is plenty of nature to explore even in urban Los Angeles."

He's right. LA's 468 square miles of land and 34 square miles of water extend to the Santa Monica Mountains and the Pacific Ocean, include nine lakes, one river, and a million trees. Within its borders are 390 public parks and 15,710 acres of parkland.

Surprised? Most people—even some who live in LA—are not aware of the immense connection the city still retains to the natural world. Los Angeles has made nature its own, woven its own unique cultural landscape onto the physical one, and perhaps shaped the tale of Mother Nature into a structure it's comfortable with—that of a Hollywood blockbuster screenplay. Jenny Price, author of the brilliant essay "Thirteen Ways of Seeing Nature in LA," writes: "The history of Los Angeles storytelling, if more complicated, still basically boils down to a trilogy. Nature blesses Los Angeles. Nature flees Los Angeles. And nature returns armed."

Isn't P-22's improbable story the stuff of which blockbusters are made? It's the puma version of *Star Wars*, or *Rebel Without a Cause*—a restless young man with a troubled past comes to a new town, finding both friends and enemies—with maybe a bit of *The Big Lebowski* thrown in. And what better setting than Griffith Park, where scenes from *Rebel* were actually filmed and where today a statue honoring James Dean stands next to the observatory.

Los Angeles has been deemed a "land of magical improvisation," and in this new zeitgeist of urban wildlife relationships, it seems to be fulfilling this description as well. As LA city wildlife officer Greg Randall offers, "Los Angeles is wildlife habitat with houses on it." Shifting our perspective to that view opens up possibilities beyond thinking the coyote a villain and the mountain lion a monster.

In a state where 90 percent of people live in urbanized areas, where wildlife is running out of space, and where people are becoming increasingly disconnected from nature, the mountain lion in a city park provides hope for a new breed of relationship with nature, not the hands-off, take-care-not-to-anthropomorphize, us-verses-them way that scientists have preached for so long. This doesn't mean approaching P-22 and giving him a friendly pat. But it does mean seeing wildlife as part of the landscape, as part of our neighborhoods.

Wildlife isn't just about idyllic nature settings, or science or environmentalism, it's about art and culture and history and spirituality. In Los Angeles, wildlife is about coexistence, about human and nonhuman residents sharing space and adapting to life together in this grand metropolis. It is a coexistence that is fraught with difficulty, and that doesn't always have a happy ending,



New kittens P-46 and P-47 in the Santa Monica Mountains in 2015.

especially for the wildlife (don't fret—just wait for the sequel), but that ultimately can be beneficial to all.

“Nature has had a mixed career in Los Angeles,” notes professor of urban studies Roger Keil, and I agree. But signs point to the city fast-tracking Mother Nature for a promotion. LAX, one of the largest airports in the world, makes way for the endangered El Segundo Blue butterfly by restoring habitat on its property, and Travis Longcore of the Urban Wildlands Group works throughout the region to expand these restoration efforts. Elementary school students at the UCLA Lab School, under the tutelage of watershed expert Mark Abramson, daylighted an entire creek on their campus and excitedly greeted the first black-bellied slender salamanders, a family of mallards that returns every year, butterflies, and a resident red-shouldered hawk. In Glendale, a whole community rallied around the famous black bear named Meatball, even fundraising for a place to relocate him after he stole one too many Costco meatballs from area homes (see page 33). Leo Politi Elementary School, in the middle of Los Angeles, installed an onsite wildlife habitat with the help of LA Audubon and the United States Fish and Wildlife Service. They added *The Sibley Guide to Birds* to their curriculum, and the students participate in the annual Christmas bird count (see page 193). Perhaps most tellingly, Mayor Eric Garcetti has moved forward a billion-dollar revitalization and restoration project that will transform miles of the Los Angeles River. Progress is happening all around us, and an urban mountain lion is the ultimate sign of the region's ecological health.

The plight of P-22 has captured the imagination of Angelinos—and people across the globe—bringing them a glimpse into a wilder world, one that refuses to be contained by the boundaries of endless paved freeways. Even some who fear P-22 and his brethren still cheer him on, sharing the sentiment expressed by Gregory Rodriguez in the *LA Times*: “I have no illusions that the Glendale bear or P-22 wouldn't hesitate to dine on me given the right circumstances. But I'm still rooting for them. Deep down

I'm hoping that if they can survive at the margins of human civilization without forsaking their wildness, so can I."

Truly, it's something to celebrate that the city that gave us Carmageddon also has allowed a mountain lion to thrive. Los Angeles now needs to prove to P-22 his journey wasn't for naught. Let's give him—and all his Santa Monica Mountain kin—a Hollywood ending by building the largest wildlife crossing in the world in one of the largest urban areas in the country. He deserves as much.



Steve Winter: Photographing P-22

Steve Winter, an award-winning international wildlife photographer for *National Geographic* who has been “trapped in quicksand in the world’s largest tiger reserve in Myanmar and slept in a tent for six months at forty below zero tracking snow leopards,” says getting the famous photo of P-22 in front of the Hollywood sign was the most challenging thing he has ever done. His photos accompanied the story “Ghost Cats,” which appeared in the December 2013 issue of *National Geographic*.

Using a series of sophisticated remote cameras and working with biologist Jeff Sikich, he tracked P-22 for fourteen months before capturing the remarkable image. “I am an eternal optimist,” he says.

But Steve isn’t just interested in a good photo. He is also passionate about protecting big cats worldwide, and he lectures globally on photography and conservation issues. *National Geographic* published Steve’s recent photography book, *Tigers Forever: Saving the World’s Most Endangered Big Cat* (with prose by author Sharon Guynup), and premiered his one-hour film, *Mission Critical: Leopards at the Door*, worldwide on its channel in January of 2016.

Steve hopes the photos of P-22 will help people appreciate these cats and show that we can live among cougars without many problems. “I also hope these photos will rally Los Angeles around building the Liberty Canyon crossing for the mountain lions,” he says. “Living with these cats is something to celebrate.”

National Geographic photographer Steve Winter.



Rat Poison: A Threat to P-22 and All Wildlife

In April of 2014, scientists released a startling photo of P-22 looking nothing like the majestic and handsome cat featured in *National Geographic*. He appeared weak and disoriented, ears drooping, whiskers bent, and his coat displayed red blotches of hair loss. He was

suffering from a bad case of mange, caused by parasitic mites, probably due to his weakened condition as a result of having been exposed to anticoagulant rodenticide, commonly known as rat poison. A study by the National Park Service has documented three mountain lion deaths to date as a result of rodenticide poisoning.

“Anticoagulant rodenticides are designed to kill rodents by thinning the blood and preventing clotting,” says Seth Riley, an urban wildlife expert at the Santa Monica Mountains National Recreation Area. “When people put these bait traps outside their homes or businesses, they may not realize that the poison works its way up the food chain, becoming more lethal as the dose accumulates in larger animals.” Fortunately, biologists administered a treatment to P-22, and photos taken six months later revealed that he had recovered. But the threat remains—he could easily suffer the same consequences again by eating prey that has ingested the common poison.

Many groups are working toward eliminating this danger for P-22 and all wildlife, with efforts that include promoting natural solutions to pest control, such as building homes for barn owls to help with rodent problems. California has introduced a series of progressive legislation calling for bans of these substances, such as Assemblyman Richard Bloom’s AB 2657, which took effect in 2015, and AB 2596, introduced by Bloom and state senator Fran Pavley, in 2016. Community groups like CLAW (Citizens for Los Angeles Wildlife) and Poison Free Malibu work to support lawmakers and educate people on how they can help. CLAW’s executive director, Alison Simard, wants to implement more extensive regulations. “We want to increase the bans, in the interest of safety for people and wildlife. Poison is poison. If your pest control company says their stuff isn’t toxic, ask them to lick it,” she says.

P-22 suffering from mange.



How David Crosby Advanced Mountain Lion Research

Another important discovery for the National Park Service’s mountain lion study in the Santa Monica Mountains came from a citizen scientist sending in a photograph from a security camera. Since the lion in the picture doesn’t have a GPS identification collar, researchers have no way of determining where it journeyed from, or even if it’s male or female, but based on the location of the sighting, some theorize another mountain lion may have crossed the 405.

How did this discovery come to light? You can thank David Crosby and his friend Chris Stills, the son of Stephen Stills of Crosby, Stills, and Nash. David is a friend of mine, and I’ve kept him posted about the adventures of P-22 (along with pikas, frogs, and other wildlife). He alerted me one night in November of 2014 that Chris had tweeted a photo of a mountain lion, asking me if this was one being studied. I forwarded the photo to the National Park Service researchers and others, who noted this might be an unusual discovery.

It certainly adds some fun to citizen science efforts when it involves two great musicians. As KPCC radio’s Jed Kim reported, “It’s the kind of wildlife story that can only be told in Los Angeles, complete with a blurry, paparazzi-esque photo and celebrities of both the human and animal variety.”

Mystery mountain lion roaming in Los Angeles.



Meet the Other Cougars of Los Angeles

P-22 is LA's most famous lion, but National Park Service researchers have marked forty-seven—and counting—in their ongoing study. Let's meet a few.

P-3: One of the first of ten lions to have been captured north of the 101, P-3 sadly died of anticoagulant rat poison in 2005.

P-12: An adventurer like P-22, P-12 is the first and only mountain lion known to have crossed the 101 from the north. He's fathered at least six litters of kittens, two with his daughter, P-19, in the fourth known example of inbreeding in this cat population. He fathered another litter with his granddaughter, P-23.

P-18: Captured and fitted with a tracking device as a one-month-old kitten, P-18 tried to find new territory as young adult but was unfortunately killed crossing the 405 near the Getty Center in 2011.

P-23: A young female—and proposed soul mate for P-22—P-23 made one of her first solo kills on the side of the busy Mulholland Freeway. The aftermath was captured in a photo by Irv Nilsen that included cyclist Danny Benson, who received the surprise of his life as he pedaled toward the lion enjoying her meal.

P-38: This male cat was captured in March of 2015 on the eastern end of the Santa Susana Mountains, north of Los Angeles. Researchers hope he will help shed some light on the impact of Highway 126 on carnivores.

P-45: Could this be P-12's challenger? This large 150-pound male surprised researchers by appearing on the scene in November of 2015. "During the course of our study, we've only been aware of one or two adult males at any given time in the Santa Monica Mountains. We're very interested to learn whether there are now three adult males or whether P-45 successfully challenged one of his competitors," said NPS biologist Jeff Sikich.

P-38 makes his home in the Santa Susana Mountains.



Making Cougarmagic: Tracking Mountain Lions with Cameras

For Johanna Turner, capturing wildlife via camera traps started as a fun hobby. By day she's a sound-effects editor for Universal Studios, but in her free time she wanders in the mountains

around Los Angeles positioning and checking her photographic equipment, and then sharing her images on the site www.cougarmagic.com. "I started setting up cameras because I wanted to see what happened on some of my favorite hikes when I wasn't there. And it turns out a lot is happening," she says. Wildlife who have made appearances on her cameras include bears, bobcats, mountain lions, and bighorn sheep.

What began as a fun pastime turned into an important science project when Johanna captured a photograph in 2010 of a mountain lion in the Verdugo Mountains, which surround parts of Burbank, Los Angeles, and Glendale. Although larger than P-22's Griffith Park home, the Verdugos still offer a much smaller territory than is typical for a cougar. "Finding a cat there was 100 percent a surprise," she says. She and Denis Callet, another photographer, shared their images with National Park Service researchers, and Jeff Sikich captured and collared the animal in 2015. He's now known as P-41.

Johanna has relished joining the ranks of citizen scientists. "It's the best. I've learned so much from Jeff—it's important to me to do things in a way that is correct and worthwhile," she says. "I never thought of myself as a scientist. I was always bad at math. So to be helpful is amazing." She hopes that, aside from their scientific use, these images will enable people to better understand and appreciate mountain lions. "How can you not like these big cats?" she says. "They are beautiful, they are curious, they are not what anyone seems to think they are, and having them on the landscape means a chance to discover something."

Citizen science revealed P-41's presence in the Verdugo Mountains.



Meatball, the Glendale Bear

The Glendale Bear, affectionately known as Meatball for his successful raids of area homes in search of Costco meatballs, became famous for his neighborhood break-ins, and for the image a live news helicopter captured of the bear startling an unsuspecting resident while

he texted on his phone.

Meatball also had his own Twitter account and conversed there regularly with P-22 about the challenges of urban living. Ultimately, because of his affinity for human food and relaxing in backyard hot tubs, this smarter-than-average black bear had to be captured in 2012 and sent to the animal sanctuary Lions, Tigers, and Bears in San Diego County, where he now resides.

The story, however, has a happy ending, as the residents of Glendale, aware their habits of leaving out trash and pet food might have made them culpable in his fate, promised to mend their ways and even raised funds for a bigger enclosure for Meatball. For the 2014 Rose Bowl Parade, Glendale created a float themed “Let’s Be Neighbors,” featuring Meatball in his famous trash-can pose. As Patricia Betancourt from the City of Glendale office said, “Glendale citizens, because of Meatball’s influence, are now dedicated to being good neighbors to wildlife.”

Meatball cooling off in a tub at his new home.

Charismatic Microfauna: The Bugs of LA

Lila Higgins, a self-proclaimed nature geek and urban nature explorer, has a mission: giving bugs their rightful due in the wildlife kingdom.

Tired of the countless cuddly puppies and

bunnies featured on the popular website Cute Overload, she knew she “had to get an insect on there,” and ultimately succeeded with a photo of a tiny baby praying mantis. Her article for the *Smithsonian*, “The Everyday Cannibals and Murderers of Los Angeles,” took a different tack, showcasing some truly scary critters lurking among us, like dragonfly nymphs that furtively swim in the LA River, using their jaws of death to capture tadpoles and small fish.

During a panel presentation I did in 2013 with Lila, the moderator asked us to nominate an “official” animal for Los Angeles. Not surprisingly, I voted for the mountain lion, while Lila offered the harvester ant, a highly social insect that forms its own cities and collaborative societies. “P-22 is charismatic,” she said, “but if you look under a microscope, you’ll discover a whole world of charismatic microfauna. Bugs help pollinate the food we eat and are a huge part of the food chain. You want big animals like bears? Well, you need grubs for them to survive.”

As part of her work with the Natural History Museum of Los Angeles County, Lila also helps with the first-of-its-kind BioSCAN citizen science project, led by Brian Brown, which documents the diversity of insect species living in the city. A paper by Emily Hartop showed that, to date, they’ve discovered thirty new insects not previously known to science, and a host not known previously to reside in Los Angeles, including Lila’s favorites, the phorid flies known as “ant-decapitating flies.” Bugs are all around, even in a city, and Lila urges people to start taking notice: “The other day on Metrolink, I saw a fig wasp crawling on my jacket. How cool—even the bugs use public transportation to move around.”

A baby praying mantis.



Calling in the Marines for the Desert Tortoise

In the battle against marauding ravens, increasing development, climate change, and a host of other challenges that has led California's official state reptile to be listed as a threatened species, the desert tortoise has acquired a formidable ally: the United States

Marines Corps.

In the past thirty years, desert tortoise populations have plummeted by 90 percent as the surge of development has taken its toll. One result of this increase in human activity is the related population explosion of ravens, one of the biggest threats to desert tortoises. These intelligent birds know that where humans go, food and shelter abound, and they have accompanied our invasion of the desert. As a result, their populations have increased 1,000 percent over the last three decades, and desert tortoise hatchlings have little defense against this growing army. To a raven, the hatchlings, whose shells can take nine years to harden completely, look like walking ravioli, as one biologist described it.

The Twentynine Palms marine corps base partnered with UCLA to create the Desert Tortoise Head Start Program on a five-acre site that hosts five hundred hatchlings secured from predators and human activity until their shells harden. In 2015, the first thirty-five young tortoises in the program were released in the wild. Every marine on the base gets briefed on their duty to help the desert tortoise, from minimizing garbage that attracts ravens to halting training exercises if a tortoise is spotted in the area. "Along with military skills, we've also trained thirty thousand marines every year on desert tortoise conservation. Some of them pursue careers in wildlife biology as a result," says Brian Henen, director of the tortoise efforts on the base. One general even adopted two pet tortoises who could not be released to the wild; he, along with some boy scouts, named them Thelma and Louise, and after he deployed to Iraq they now serve as educational ambassadors for the facility.

Col. James F. Harp releasing a desert tortoise.



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ABOUT THE AUTHOR

Beth Pratt-Bergstrom has worked in environmental leadership roles for more than twenty-five years, and in two of the country's largest national parks: Yosemite and Yellowstone. As the California Director for the National Wildlife Federation, she says, "I have the best job in the world—advocating for the state's remarkable wildlife." Her conservation work has been featured by the *New Yorker*, the *Wall Street Journal*, *BBC World Service*, *CBS This Morning*, the *Los Angeles Times*, and NPR, and she has written for CNN.com, *Boom: A Journal of California*, *Yellowstone Discovery*, *Yosemite Journal*, *Darling*, and *Inspiring Generations: 150 Years, 150 Stories in Yosemite*. She is the author of the novel *The Idea of Forever* and the official *Junior Ranger Handbook* for Yosemite. Beth lives outside of Yosemite, "my north star," with her husband, four dogs, two cats, and the mountain lions, bears, foxes, frogs, and other wildlife that frequent her NWF Certified Wildlife Habitat backyard.



The author with an elephant seal at Año Nuevo State Park.

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"This delightful book details our ever-evolving relationship with Earth's wildest creatures, promising that peaceful coexistence is possible."

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"Here is a book full of essential wisdom. Natural history, science, politics, and the storyteller's art interweave, inviting us into a new intellectual terrain that inspires knowledge, wonder, delight, and action."—Lyanda Lynn Haupt, author of *The Urban Bestiary: Encountering the Everyday Wild*

Wildness beats in the heart of California's urban areas. A mountain lion known as P-22 lives in the middle of Los Angeles. Porpoises cavort in San Francisco Bay after a sixty-five year absence. And on the Facebook campus in Silicon Valley, Mark Zuckerberg and his staff have provided a home for an endearing family of wild gray foxes. A movement of diverse individuals and communities is taking action to recast wildlife as an integral part of our everyday lives. *When Mountain Lions Are Neighbors* explores this evolving dynamic between humans and animals, including remarkable stories like how Californians are welcoming wolves back to the state after the incredible journey of the wolf OR-7, how park staff and millions of visitors rallied to keep Yosemite's famed bears wild, and many more tales from across the state. Written by Beth Pratt-Bergstrom of the National Wildlife Federation, these inspiring stories celebrate a new paradigm for wildlife conservation: coexistence.

Published in collaboration with the National Wildlife Federation. Proceeds from the sale of this book directly benefit the NWF's wildlife conservation work in California.

