LIving on the Fringe

There's a prowler loose in America's suburbs, but don't worry, the bobcat is only looking for rodents.

A Wildlife Ecologist Seth Riley watched from the hillside, a bobcat strolled along a trail in the Golden Gate National Recreation Area near San Francisco. In the early morning stillness, the cat searched for rodents in the nearby grass. Then it heard the voices of two approaching hikers. "They'll scare him away for sure," thought Riley. But as the people drew near, the bobcat did an amazing thing. It walked about 10 yards off the trail and sat down behind a bush. When the hikers passed, the cat returned to the trail and its hunt.

This shadowy near-encounter symbolizes the relationship bobcats have fashioned with people. The shy and reclusive creatures have long been known as skilled wilderness hunters, capable of eating almost any prey and living in a variety of habitats. Now, while many other carnivores exist only in remote areas, biologists have found bobcats thriving on the doorsteps of America's cities and suburbs. "Bobcats are extraordinarily adaptable," says Judd A. Howell, research wildlife ecologist with the U.S. Geological Survey. Nowhere is this cat's versatility demonstrated more clearly than around California's largest cities.

Since the 1980s, researchers have studied bobcats in the 75,000-acre Golden Gate recreation area. With nearly 14 million annual visitors, Golden Gate is the second most popular unit in the national park system, yet it is home to a high density of bobcats. At least 20 of the felines occupy the 8 or 9 square miles of park adjacent to urban development.

"The bobcats tend to stay out of the developed areas, but they often aren't far away,"
says Howell, who directs the Golden Gate bobcat work. On a walk in the park, Nancy Howell (Judd's wife) once came upon a freshly killed fawn. Before she could examine the animal, however, the low growl of a bobcat convinced her to retreat toward the streets and homes of Sausalito just 50 yards away.

Pamela Donegan, who earned her master's degree in biology from San Francisco State University by observing the animals, tells of one park bobcat that sat nonchalantly in 6-inch vegetation as hikers passed, oblivious to the feline, 15 feet away. "As long as people don't look at or approach them, the bobcats seem to act as if the humans aren't there," says Donegan. It is not unusual for a bobcat to sit on a hillside and watch hundreds of people pass on a nearby hiking trail.

Meanwhile, 400 miles to the south, other researchers are watching the 150 or so bobcats that inhabit the 60-to 65-square-mile portion of the Santa Monica Mountains National Recreation Area in and around Los Angeles. "We have lots of bobcats living within the city limits of Los Angeles," says Ray Sauvajot, wildlife ecologist with the National Park Service. "And they aren't just visitors. They establish home ranges, set up dens, produce young and catch whatever prey they need." Other communities with bobcats at their edge include Malibu, Thousand Oaks and Agoura Hills.

Los Angeles residents (the human type) often spot bobcats while walking in the city's brushy canyons. And one female feline raised her young in a hillside den that overlooked a major freeway intersection. "These bobcats are quietly coexisting with millions of people and tolerating the hustle and bustle of Los Angeles," says Sauvajot. "It's amazing."

But then bobcats have a history of surprising people. During the nineteenth and early twentieth centuries, relentless persecution eliminated predators such as wolves, cougars and grizzlies from huge chunks of North America. But the bobcat held on and continued to occupy part of nearly every state and Canadian province.

In the 1970s, bobcats came under a new kind of attack. When the Convention on International Trade in Endangered Species (CITES) halted traffic in the skins of leopards, cheetahs, ocelots and other spotted cats, the world's furriers turned to the American bobcat. The price of a good bobcat pelt skyrocketed to $600, and trappers set about harvesting as many as possible. Before long, however, fashions changed and furs fell out of style. Trapping pressure declined sharply and remains light. In 1992, the U.S. Fish and Wildlife Service estimated nationwide bobcat numbers at 700,000 to 1.5 million—perhaps more than there were in colonial days. The agency says the bobcat's status remains good today.

The bobcat is one of seven wild feline species in North America. Its closest relative is the lynx, a bobcat doppel-ganger distinguished (sometimes with difficulty) mainly by its longer legs and larger feet. An average bobcat weighs only about 20 pounds—barely twice that of an average house cat—and stands about 22 inches tall at the shoulders. Its dense, soft fur is generally gray or brown, sometimes with a slightly reddish tone.

Bobcats hunt by sight and sound (not smell), and are sprinters that must abandon a chase if it lasts more than a few seconds. Quintessentially feline, the same bobcat that slays a deer may an hour later playfully swat at insects in a puddle. Bobcats also display typical feline dignity, choosing to eviscerate prey such as pocket gophers before dining. "They do appear to be more elegant eaters than the gulp-and-swallow canines," notes Howell.

Bobcats are found from coast to coast in the contiguous United States, with all but a few
midwestern states having populations. In Canada, bobcats inhabit every province except Newfoundland, Labrador and Prince Edward Island, although they do not range very far north. While most bobcats live quiet lives far from human habitation, biologists are now learning that the creatures' territories may begin literally where human backyards end. One purpose of the two California research efforts is to see what makes these cats so successful.

A big component of bobcat prosperity is the cat's ability to live in all sorts of terrain. They seem equally at home in swamps, farmland, mountains, woods, prairie and desert. Bobcat habitat often includes brush or woods for resting and raising young, and meadows and other open places for hunting. But any area with enough prey can support bobcats-even urban fringe.

One cat reportedly made its living hunting rats in a Pittsburgh garbage dump, and another by repeatedly raiding a bird feeder in Tucson. Twenty years ago, New Jersey had few if any bobcats. Then authorities released 24 cats captured in Maine. Today, bobcats appear to be thriving in 10 of New Jersey's 21 counties, including one 8-square-mile township with 15,000 people.

Bobcats exhibit neither the street-swaggering chutzpah of coyotes nor the in-your-face peskiness of raccoons. The cats will cross lightly trafficked roads, but they balk at traversing freeways. And while a bobcat may enter a backyard that borders an open area, it is unlikely to venture very far into a housing tract. Biologists aren't exactly sure what keeps bobcats off the streets. "Apparently," says Sauvajot, "they perceive some kind of threat in the suburbs, although that danger may exist more in the bobcat mind than in reality."

Typically, each bobcat occupies a defined home range. Ranges of opposite-sex bobcats often overlap, but same-gender neighbors generally are excluded. Most trespassing is prevented by "keep out" signs in the form of urine or feces deposits. Like a homesteader who determines the size of his farm by gauging the fertility of the land, bobcats tailor their home ranges to match the abundance of prey. The more plentiful the food, the smaller any cat's hunting ground needs to be. One reason for the high bobcat density near San Francisco is that area's profusion of voles. And around Los Angeles, rabbits and ground squirrels are abundant. But in the rugged mountains of Idaho, a cat may need to prowl 30 square miles to make a decent living.

Another ingredient in the success recipe, says Howell, "is the bobcat's ability to learn and modify its behavior." Some urban-fringe bobcats may be growing more nocturnal, perhaps to avoid people. And in Los Angeles, where pockets of habitat lie interspersed with subdivisions, bobcats have learned to travel to these "islands" by following tiny stream bottoms, narrow fingers of brush and other corridors. "If there's a way to get to isolated habitat without crossing streets or lawns, the bobcats will find it," says Sauvajot.

Wherever the bobcat lives, it eats what is available: jackrabbits on the plains, cotton rats in the South, deer in New England and mice almost everywhere. One study in Florida examined the contents of 413 bobcat stomachs (provided by trappers and gleaned from road kills) and found that bobcat cuisine included 18 different mammal species, 14 kinds of birds and even two reptiles--one a pygmy rattlesnake.

When populations of California voles, the bobcat's preferred prey at Golden Gate, ebbed, the cats quickly turned to pocket gophers-sometimes moving to a new area to do so. "Bobcats make strategic decisions on the basis of food availability," says Donegan. "They
appear to track their capture success rate daily and move to a new place if the hunting is poor."

Bobcats also display tremendous patience while hunting. To get at pocket gophers, which spend most of their time underground, the cats apparently find a fresh gopher mound, then plop down and wait as long as 45 minutes until a victim emerges. Even above-ground voles may require an unhurried style. More than once, Donegan saw a foraging bobcat stop, cock its ears and wait 20 minutes or more before pouncing. "They had more patience than I did," she says. "I wanted to yell, 'Do something!'

The extent of the bobcat's predatory skill is most apparent in its ability to kill deer, which may weigh four or five times as much as the cat. Bobcats kill adult deer on occasion, but they are more likely to prey on fawns--still no mean feat. While radio-tracking bobcats one day in Golden Gate, Riley heard a snorting doe making quite a fuss. He arrived on the scene to find a fawn in the jaws of a large male bobcat 10 feet up a tree, where the 26-pound cat had carried its 30- or 40-pound prey.

Most often, however, deer win the battle with bobcats. Donegan even discovered that deer sometimes chase away bobcats. On several occasions, she watched as one or more pregnant does badgered a foraging bobcat until it left the area. While being careful not to get closer than about 20 yards, the deer relentlessly walked after the bobcat for about an hour. "I could almost imagine the bobcat saying, 'Okay. All right. I'm leaving.'"

In the long run, human disturbance, vehicles and habitat fragmentation are much greater threats to urban-fringe bobcats. "Crossing streets and lawns for long distances is not an option for the bobcat," says Sauvajot. But somehow the cats are managing to exploit the habitat that they find. Says Howell, "Our research goal is to understand how these cats manage to persist in the face of sweeping development."

Every theory is fair game. Right now, as you read these words, several bobcats are probably curled up sleeping or quietly hunting just a quarter mile from the Golden Gate Bridge, with the spectacular vista of San Francisco and the bay spread out before them. "Who knows," says Howell, "maybe they're here because they like the view."

By Gary Turbak

Photographs by Michael Evan Sewell