



Bad News Bears

Every night, while campers sleep peacefully nearby, a high-stakes battle takes place in Yosemite Valley. On one side, the park's team of wildlife biologists. On the other, Yosemite's population of smart, sneaky black bears.

BY ELISABETH KWAK-HEFFERAN

AS MANY AS 500 BLACK BEARS
CALL YOSEMITE HOME.

PHOTO BY ISTOCK

Picture this: You're hiking the John Muir Trail through Tuolumne Meadows, the late-afternoon sun filtering the world through a warm shade of gold. Suddenly, you detect movement from the corner of your eye and swivel your head. There, over by that boulder, you see a round, dark shape snuffling through the grass. You freeze, and the black bear raises its head to look you straight in the eye. Your stomach bottoms out as you take in the bear's bristling muscles, its cinnamon fur, its direct, curious stare. It lasts two, three seconds, then the bear casually turns and ambles into the woods, blending with the shadows. The exhilaration leaves your knees a bit shaky.

Contrast that scene with this one: Campers are kindling their fires at North Pines Campground when a commotion breaks out. A child shrieks, and someone drums on a frying pan. The campground intruder, a 300-pound bear, slinks among the picnic tables. Headlights flash; car horns trumpet. The bear finds what it has been looking for—today, an unattended pack of hot dog buns—snatches it, and galumphs off with the bag swinging between its teeth.

The first encounter is what Yosemite's rangers might call perfect; the second, well, just about the opposite. Where the former is thrilling and wild, the latter is dangerous—for park visitors and for the bear.

Yosemite National Park is home to an estimated 350 to 500 black bears (grizzly bears no longer live anywhere in California). The bruins thrive in the park's rich habitat, nibbling manzanita berries, browsing on grasses, and crunching acorns before retiring to their cozy dens for the winter. At least, that's how it should go. But as long as people have been gaping at Half Dome, some bears have been learning that calorie-rich human food is an easier, tastier treat than their natural diets. As millions more people flocked to Yosemite to hike, camp, and sightsee over the years, more bears made the connection. And that's a big problem.

Bears have a natural fear of people. When a visitor runs across a wild bear in the park's undeveloped areas, the animal will usually turn tail and run. But it's a different story for a bear that has learned that where there are people, there will inevitably be granola bars: These food-conditioned bears lose their fear and start approaching cars, tents, and even people looking for an easy meal. Though it's very rare for a wild black bear to act aggressively, problem bears are a bit like junkies—unpredictable and willing to do almost anything for their next fix.

So it's in everyone's best interest to minimize frontcountry encounters like the one in the campground. Luckily, Yosemite's crack team of bear scientists is on duty.

ONE NIGHT LAST OCTOBER, around 1 a.m., Wildlife Biologist and the Field Lead for Bear

Management Ryan Leahy was in his Yosemite Valley office when his radio blared a recorded alarm: "Bear in Upper Pines Campground." He cruised over to the campground, where he met two other members of his team. One gestured to the far side of Happy Isles Road, about 30 yards away, where they'd tracked the bear using radio telemetry equipment; Leahy could see the animal's eyes shine in his flashlight's beam.

This particular bear was no stranger to the management team. His radio collar had a distinct frequency, so the rangers could identify him even in the dark: a 350-pound male, between 8 and 10 years old, with a bad habit of sneaking into Valley campgrounds in search of food. The rangers turned off their lights and waited to see what the bear would do. They didn't have to wait long.

The bear struck off into the campground. Though it was pitch-dark, the radio collar told the team exactly where the bear was going, so they walked quickly to head him off, shouting, "Get out of here, bear! Get out of here, bear!" Once they reached the edge of the campground, Leahy raised a shotgun loaded with beanbag rounds to his shoulder and fired; the bag smacked the bear's rump, sending him running. The beanbags (or paintballs or rubber slugs, both of which rangers also deploy) aren't meant to injure the bears, but they do hurt. "We want the bear to associate scary, painful stimulus with human contact," Leahy explains.

Suddenly, the bear stopped dead about 40 yards ahead of the rangers. Seasonal Wildlife Technician Rob Lester raised a starter pistol and shot off a pyrotechnic round with an echoing bang. The bear finally whirled and sprinted off into the wilderness. From alarm to finish, the incident had taken less than 15 minutes.

WHEN A BEAR BECOMES TOO BRAZEN, the park's bear biologists must make the difficult decision to kill it before it hurts someone. "It's the bears that are getting too close to people, bluff charging, getting into occupied buildings," Caitlin Lee-Roney, wildlife biologist says. "All of these problems are human-caused. Unfortunately, the bears are the ones that get punished for it in the end." Wildlife managers have a saying: A fed bear is a dead bear. Yosemite's team puts down an average of two bears per year.

Today, Yosemite employs 15 bear management rangers and volunteers in the high season to try to keep things from going that far. "Our job is to mitigate the availability of human food to bears to prevent that behavior from becoming ingrained," Leahy says. "It's bear management, but it's mostly human management." The rangers patrol campgrounds and picnic areas 24-7, making sure visitors are storing their food properly (see right) and all trash is completely stowed in bearproof garbage bins. And when an overly curious bear enters a developed area, the team responds immediately to scare it away—

Bear Necessities

Sharing a habitat with Yosemite's bruins means taking care to keep these wild animals wild. Follow these precautions while in bear country:

FOOD STORAGE

IN CAMPGROUNDS AND TENT CABINS

>> After dark, pack everything that has a scent—including food, soap, toothpaste, and trash—inside the bear lockers provided. Only remove items when you're using them.
>> Never leave food or other smelly items in your car, truck bed, or roof compartment overnight. Bears can and do break into cars.

IN BACKCOUNTRY CAMPSITES

>> Pack food and scented items in a park-approved bear canister (find a list of brands at myyosemitepark.com/resources). At night, place the canister 100 yards from the tent.
>> Don't hang your food from a tree. Yosemite bears are experts at raiding bear bags (and it's against park rules).



sometimes dealing with 8 or 9 different bears a night—in the hopes that the bear will decide that humans aren't worth the trouble.

The park takes bear management very seriously these days, but it wasn't always this way. In the '20s and '30s, rangers actually fed the bears for visitors' entertainment. And up until 1971, the park maintained open garbage dumps to attract hungry bears, which became quite a spectacle for visitors. Not surprisingly, these policies led to a lot of food-conditioned animals—and a lot of dead bears. "We've been struggling to solve the problems we helped create in the early 1900s," Lee-Roney says.

The park switched tactics and began actively trying to prevent bears from accessing human food. With funding help from the Yosemite Conservancy, the park's nonprofit partner, rangers installed bearproof food lockers in the campgrounds and required backpackers to lock all scented items in bear canisters. Still, some wily Yosemite bears proved up to the challenge.

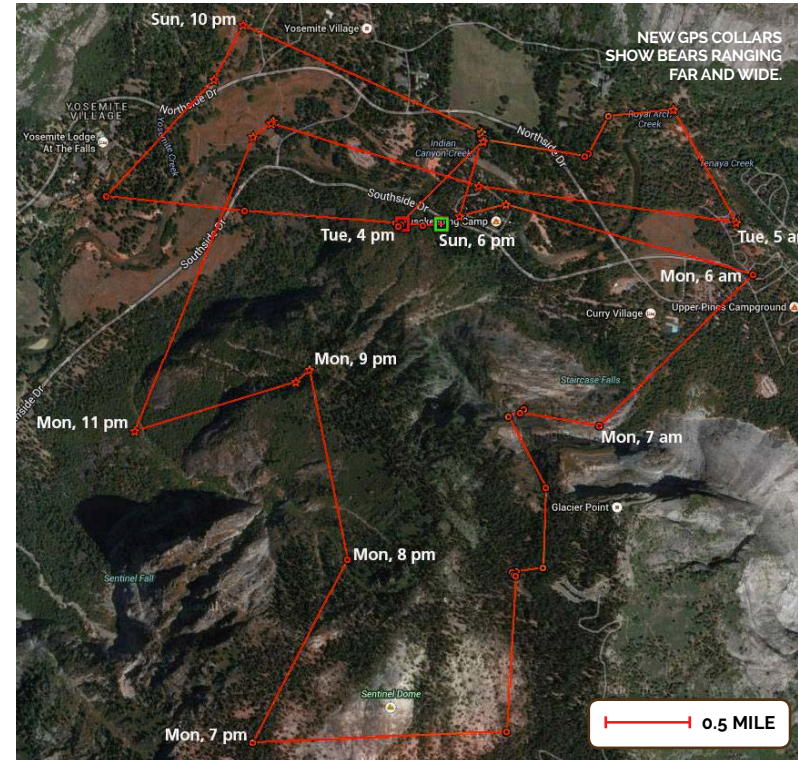
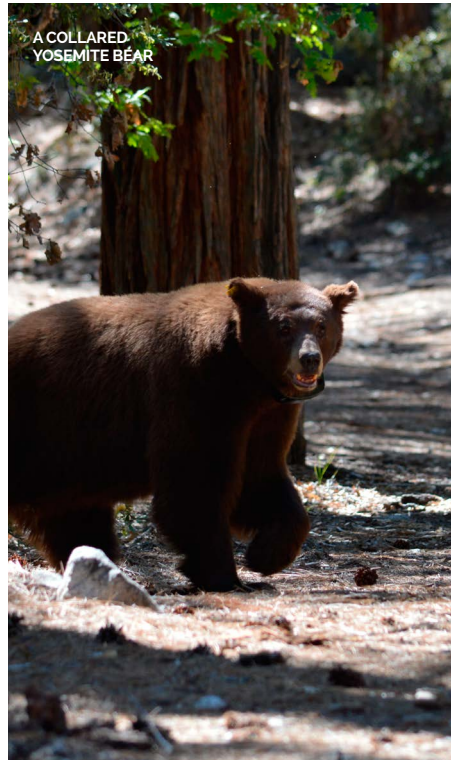
About that bear canister requirement: In years past, backpackers were advised to hang their food from a tree, out of a bear's reach. "That's not allowed anymore because bears went to every extent to get it," Lee-Roney says. "They would shake the branch, climb out on the branch," even take a flying leap from another

tree and grab the suspended bear bag on the way down like a football player going for a hail-Mary pass.

It's the same story in the frontcountry. Bears have an excellent sense of smell and can detect food and other scented items even when they're hidden. Visitors aren't allowed to leave food in their vehicles overnight because bears can force windows down and shred a backseat to get at trail mix left in the trunk. "We have bears that can open car doors. Mothers definitely teach their offspring," she adds. Some bears hide behind food lockers and pop up when campers approach, hoping to scare them into dropping their s'mores fixings; others swoop in when people turn their backs on an open locker for just a moment. One infamous bruin might even have been able to open bear lockers with its tongue (biologists never proved it, and the bear could have simply been accessing improperly latched lockers). Clearly, the bear managers have their work cut out for them.

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ONE OF THE TEAM'S MOST HELPFUL TOOLS in recent years has been radio telemetry collars like the one Leahy used to haze the bear last October. If rangers suspect a certain bruin has been hanging around developed areas, they trap and outfit it with a collar and an ear tag so they can keep a closer eye on it. Then the bear goes free. The next time that bear strays into the Valley, its collar sends an alert to the park's radio telemetry system, and rangers can track the bear by listening to the beeps on



PHOTOS BY NPS PHOTO



their antenna receivers.

At least until the bear walks back into the wilderness, that is. Radio collars have a limited range, so wildlife biologists never knew where the bears were going once they left the Valley. But all that changed last summer, when the tracking system got a major boost with the introduction of GPS collars (the Yosemite Conservancy funded the project at \$5,000 a pop). Unlike radio collars, GPS collars send a tracking signal every hour via satellite, letting rangers watch an individual bear's movement. "When the bear is outside the range you can pick up audibly, you can look at a computer and see where they're going," Lee-Roney explains. Nine bears were collared at presstime, with plans to outfit 6 more.

That technology helps rangers deal with problem bears in new ways. When the GPS data on one bear showed he was consistently entering a campground at 3 a.m., after the managers' latest shift, the team could adjust their hours to catch him in the act. But it also offers an unprecedented look into bear behavior at Yosemite. "It's about mitigating bear-human interaction, but it's also about, What do bears do?" says Mike Tollefson, president of the Yosemite Conservancy. "What's their lifespan? Do they den in the same place every year? We can see if they come out in the winter. It's incredibly exciting."

Rangers have already been struck by how far these bears can travel, sometimes covering 30 or 40 miles in the park and into surrounding areas in a couple of days. And the collars have already helped the team solve at least one puzzle: "Last September, all the bears left the Valley," Lee-Roney says. "That often happens in September, and we figured there were good food sources outside the Valley. This time, we could see how far they were going and figure



out what vegetation type was there. Now we know lots of bears were focusing on sugar pines at high elevations."

Bears opting en masse for natural foods—music to a wildlife biologist's ears. And though the park still deals with habituated bruins every day, things have gotten a lot better in recent years. Thanks to the bear management team's vigilance and visitors doing their part, the animals are wilder than ever. A 2014 study that used isotope analysis of hair and bone samples found that 13 percent of Yosemite bears' diets came from human sources in the 2000s, down from 35 percent from 1975 to 1985.

If this trend continues, more and more people will encounter Yosemite's amazing black bears out in wild places like the trails of Tuolumne Meadows, and fewer will have to watch a bear make off with their lunch. And that means more visitors will enjoy one of the park's most exhilarating wildlife encounters: a glimpse of a black bear in its native habitat, acting like the impressively wild animal it is. "It's really exciting to see a wild bear out in the park," Tollefson says. "It really exemplifies the spirit of Yosemite." ♦

IF YOU SEE A BEAR

IN DEVELOPED AREAS

>> Scare the bear away by shouting or banging pots and pans. Bears that learn to avoid people are less likely to become problem bears.

>> Report all bear incidents to a park ranger.

>> Never approach a bear! Like all wild animals, they can be unpredictable and dangerous.

IN THE BACKCOUNTRY

>> Keep a safe distance of at least 50 yards from the bear. Photographers, this is a good time to employ your zoom lens.

>> If a bear comes into your camp, do all you can to scare it off: Yell, bang pots, and throw pine cones until it walks away. Be persistent if necessary.

>> Count yourself lucky! Watching a black bear in its native habitat is one of Yosemite's most thrilling experiences.

MEET THE BEARS

Bears typically weigh up to 200 and 350 pounds; the largest ever captured in the park tipped the scales at 690 pounds. // Most black bears are actually brown, blond, or reddish-brown. // Bears are excellent climbers.

In fall, bears eat up to 20,000 calories a day. // Their favorite foods are berries, acorns, ants, and insect larvae. // Bears hibernate, but not deeply—they may wake up occasionally in winter. // Females give birth to one to three cubs while in hibernation.