

SAVING SANCTUARIES

Critics charge that sanctuaries for retired research chimpanzees are failing their animals. Can a new tool help?

n a chilly morning in early October, primatologist Steve Ross drives up to a chain-link gate blocking a narrow dirt road in northern Georgia. He steps out of his car into a swath of the Blue Ridge Mountains and watches the cresting Sun illuminate low fog on the wooded hills. "When I went to Tanzania," he says, thinking back on the first time he saw wild chimpanzees, "it was just like this."

By David Grimm.

in Morganton, Georgia

A green sign on the gate reveals why Ross is here: "Project Chimps," it reads. "Providing Lifelong Sanctuary to Chimpanzees Retired from Research."

The refuge is one of about a half-dozen chimp sanctuaries in North America, all designed to give the primates a more natural life than they had in labs, homes, or the entertainment industry. Founded just

6 years ago, Project Chimps made a name for itself by promising to retire more than 200 chimpanzees-about one-third of all ex-research chimps at the time-from a major biomedical facility.

Yet, since April, about a dozen former workers have alleged that the sanctuary is jeopardizing the welfare of its apes with inadequate veterinary care, insufficient outdoor access, and failing infrastructure. Similar charges have been leveled against two other major chimp sanctuaries, rais-

Primatologist Steve Ross begins his assessment at Project Chimps.

ing concerns about nearly half of the North American system.

"I think sanctuaries are going to be questioned very seriously going forward," says Cindy Buckmaster, chair of the board of directors of Americans for Medical Progress. When the U.S. government decided to retire its chimpanzees in 2015, she and others in the biomedical community predicted these problems, saying animals would actually fare worse in sanctuaries. The facilities have taken on too many chimps too quickly, Buckmaster argues, and lack the resources and experience to properly care for them.

Ross is here to see whether that's true. The director of ape study and conservation at Chicago's Lincoln Park Zoo, he's a proponent of sanctuaries and the board chair of the world's largest, Louisiana's Chimp Haven. He's also one of the country's most respected chimp experts and has published dozens of studies on how to best care for the animals in captivity. By his own account, he has visited every chimp facility in North America, from tiny roadside zoos to giant biomedical operations. "As long as it wasn't born in the past 5 years," he says, "I've met that chimp."

Today, Ross has arranged to arrive unannounced at Project Chimps to try out a new tool he's developing to assess chimpanzee welfare. Based on what the latest science says these animals need, the approach considers everything from the size of chimp social groups to the thickness of their bedding. The result: a comprehensive report of what a sanctuary is doing right and wrong, as well as an overall score that the public can see.

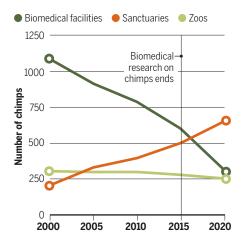
Ross hopes his tool, a pilot project funded by the Arcus Foundation, will give sanctuaries more scientific guidance and help the system keep its trust with the outside world, including the donors critical to its survival. If widely adopted, he thinks his approach could lead to better lives for chimps in facilities throughout the world. But all of that depends on how the tool performs today at Project Chimps.

A STAFFER DRIVES UP and opens the gate. Ross, 50, with salt-and-pepper stubble, continues down the narrow road until it ends at a tan, three-story building known as the Chateau. At 650 square meters, this is the largest structure on campus and home to two groups of 14 chimpanzees, more than one-third of the 78 animals that live at Project Chimps. The Chateau and four other chimp "villas" punctuate a tall concrete wall topped with electric wire that encircles a forested, 2.5-hectare habitat.

Soon after we arrive, employees open the Chateau's outer gates. One group of chimps, hooting and banging the walls in anticipation, makes its way into the habitat. The gang includes celebrity pair Hercules and Leo, the oldest males in the group. For several years, they were the subject of an animal rights campaign to have them declared legal persons and released from their university lab. Today, the two have made new friends and "appear to enjoy life," says Project Chimps Executive Director Ali Crumpacker, who has joined us for the visit.

Chimps on the move

After invasive research on chimpanzees in the United States ended in 2015, sanctuaries began to take large numbers of retired chimps from biomedical facilities.



Ross, his pen perennially pressed to a stack of papers in his left hand, eyes the chimps from the roof as they expand into the hilly thicket of sourwood, pine, and walnut trees. Some scour for coconut shavings and pistachios the staff has scattered on the ground. Others sprawl on Sun-soaked climbing platforms. And others poke sticks into an artificial termite mound, pulling up peanut butter, applesauce, or whatever employees have loaded it with today. "Subjectively speaking," Ross says, "this is the best chimp yard in North America."

But it's also the subject of controversy. The habitat has been Project Chimps's main selling point, helping it secure millions of dollars in donations as well as the confidence of the New Iberia Research Center, which in 2016 pledged to send all 220 of its chimpanzees here. Yet a website run by former sanctuary employees claims the animals spend "90% of their retirement in concrete rooms," not much different from their housing at New Iberia.

Former workers also allege that Project Chimps brought in more animals than it could handle, leading to vicious fights and an uptick in stress behaviors like rocking and hair pulling. And they claim the sanctuary's only veterinarian had no primate experience and that buildings are in disrepair. "There doesn't seem to be much reason to continue to uproot these chimps, only to offer care that's worse than they had at the research facility," says Crystal Alba, who worked at Project Chimps for 3 years before she says she was fired for speaking up.

The accusations, detailed in local news coverage and in *National Geographic*, have attracted the attention of animal rights groups. Many have criticized the sanctuary online. One group, in a campaign reminiscent of those animal advocates typically stage against research labs, protested outside the home of a board member of the Humane Society of the United States, the sanctuary's biggest funder. Signs called him an "animal abuser" and featured photos of a chimp with a deeply split lip.

Former employees have also leveled charges against Florida's Save the Chimps, where 228 chimpanzees reside. A 3-month probe by a local news outlet detailed allegations including employee fights over how to care for the animals, which may have led to the death of one chimpanzee, and a short-staffed medical department that was slow to euthanize a dying chimp. The U.S. Department of Agriculture (USDA) has cited the sanctuary for 12 breaches of the Animal Welfare Act over the past 5 years, three for significant violations of medical care.

One former caregiver at Chimp Haven, who spoke to *Science* on condition of anonymity because of a nondisclosure agreement, raises complaints against that facility as well. She contends that the sanctuary—the only one funded by the U.S. government, and the home of more than 300 chimpanzees—didn't treat serious wounds and didn't fix heating issues in older buildings. She also alleges that staff was spread so thin it lost track of a male chimp that drowned in the sanctuary's moat.

Sanctuaries have pushed back against the accusations. Crumpacker says stress behaviors like hair pulling can predate an animal's time at Project Chimps. She says the sanctuary's veterinarian routinely consulted with primate experts and that a newly hired vet has some chimp experience. And although Crumpacker admits the animals here don't go outside as much as she would like—she estimates 12 to 24 hours per week—she points out that the New Iberia chimps have no outdoor habitat at all.

To increase outside access, she'd have to further divide the sanctuary's habitat, already split in two, so more groups could go outdoors at the same time. But that would deplete funds for bringing more chimpanzees to the sanctuary, she says. "We not only have to do the right thing for the animals that are here, but also for those that are not here yet."

A spokesperson for Save the Chimps says, "Chimpanzee care is an extremely complicated undertaking," but "we have both the expertise and the best interests of chimps in mind." Chimp Haven President Rana Smith adds that her sanctuary has enough staff to closely monitor every chimpanzee, and that it's constantly improving its infrastructure. "We pride ourselves on exceptional welfare."

Inspections over the past few years by USDA and the Global Federation of Animal Sanctuaries (GFAS) have found no major problems at either Project Chimps or Chimp Haven. And although USDA cited Save the Chimps, it has not levied fines. But many experts across the sanctuary world say such evaluations are often superficial, inconsistent, and not tailored to chimpanzees. That's something Ross hopes to change today.

WHILE THE CHATEAU chimps enjoy their outside time, Ross enters their enclosure. There are 11 rooms, including two large playrooms and two porches with views of the habitat. "It's like a house," Crumpacker says. "You can decide which room you want to be in, and whether you want to hang out with other people."

Ross measures the size of each room; the floor space covered in hay, blankets, and other substrates; and the number of perches and ropes the animals can climb. He also looks for steel panels that partially block the view of other rooms, allowing the primates to hide from their comrades if they're feeling stressed. "All of these are things we know from the literature are important for chimp wellbeing," he says.

Word comes over a walkie-talkie that another group of chimpanzees is about to be let out on the other side of the habitat. So we hop in a golf cart and head over to the Chimps Ahoy Villa, home to a special group of apes.

Project Chimps, like most zoos and sanctuaries, is always trying to increase the size of its chimpanzee groups to better replicate wild troops of more than 100 individuals of mixed genders and ages. It's a tricky business, as you never know who's going

to get along with whom. Just last week, staff merged nine males with 10 females at Chimps Ahoy, making the group one of the biggest in the sanctuary system.

Ross says biomedical facilities sometimes separate chimpanzees by sex to avoid babies. "It's so unnatural for chimps," he says. "When you have single-sex groups, you miss out on all the things chimps do, including mating." (Males here get vasectomies, and the females are on birth control.)

We watch the chimps through a window in the giant concrete wall. Soon, a 32-year-





Chimpanzees browse an outdoor habitat at Florida's Save the Chimps (top). Leo, pictured at Project Chimps (bottom), was the subject of an animal rights campaign to have him declared a legal person.

old chimp with a graying muzzle named Justin ambles by. He has a deep gash in his back, looking a bit like a velociraptor took a swipe at him. It's the kind of untreated wound that might show up in a whistleblower complaint.

Ross is unfazed, however. He says Justin is a low-ranking chimp, which means he gets beat up to make sure he knows his place—the same sort of hierarchical conflict that happens in the wild. "If the sanctuary took him out of his group and gave him vet care,"

Ross says, "they might beat him up worse."

Still, Ross doesn't take wounds lightly. As he travels from villa to villa throughout the day, he spot checks every chimp, looking for injuries and stress behaviors that could be a sign of poor welfare or unstable groups.

Everything Ross records feeds into his new tool, which produces three scores: "social," assessing all chimps and the size, composition, and stability of their groups; "spaces," based on the size and complexity of the animals' environments; and "programs," gauging vet care, staff experience, and diets.

The sanctuary gets a full report, and the public sees a summary and final grade.

Ross's inspection is much more chimp-specific than that of USDA, whose 336-page guidelines mention the word "chimpanzee" only three times. The agency's assessments also tend to be brief to the point of obscurity. A recent review of Project Chimps contained a single sentence: "No noncompliant items identified during this inspection."

In addition, Ross says, "USDA standards haven't changed much over my lifetime," whereas his review is based on the latest research. For example, Crumpacker says according to the agency's metrics, Project Chimps's smaller villas could house up to 45 chimpanzees. "Steve says 15. It's not just about how many chimps can occupy a space—it's about how well they live there."

GFAS inspections are more thorough than those of USDA, but they're not made public and not chimp-specific. Ross's approach is also more scientific, Crumpacker says. "Steve was asking about all of the [bedding] materials we use, and how much each chimp got, in inches," she says. "GFAS might just say a group of chimps should get 12 blankets a day. And USDA

just cares that we wash them."

GFAS Executive Director Valerie Taylor agrees Ross's tool adds value. "We would absolutely welcome something like that," she says. "There's power in pooling resources."

Andrew Halloran, director of chimpanzee care at Save the Chimps, also embraces the tool. "Taking care of chimpanzees is a complicated science, and Steve's approach treats it like one," he says. His facility has recently adopted new guidelines with a more scientific approach to chimp welfare. Sanctuaries,



Project Chimps's large, lush outdoor habitat has been one of its main selling points—and one of its biggest sources of controversy.

Halloran says, are evolving from rescue organizations into more sophisticated operations that realize that an "evidence-based way of doing things is critical to providing good care."

Experienced biomedical facilities, meanwhile, would likely have no use for Ross's tool, says Steven Schapiro, who oversees primate welfare at the MD Anderson Cancer Center. He says operations like his, which cared for hundreds of chimps for decades, already have the knowledge they need.

Still, Schapiro says he thinks Ross's tool could help sanctuaries, which he believes "are 100% committed to the welfare of their chimpanzees." The problem, he says, is that they lack access to the same knowledge and funding as the biomedical community.

There's no easy fix for those deficiencies, Buckmaster argues. If Ross recommends sanctuaries hire more experienced staff, for example, she says, "I don't know where they're going to find them." That's why she and others in the biomedical community have argued that ex-research chimps should "retire in place" at research labs. That debate continues to play out as the National Institutes of Health considers which of its remaining 135 or so chimpanzees will move to sanctuaries as planned. Last year, the agency announced that nearly four dozen chimps would stay at the Alamogordo Primate Facility in New Mexico because they were too old or sick for transport. It reiterated that position last month despite congressional pressure.

Ross's approach also raises an existential issue for sanctuaries: Is it even possible to give chimpanzees what they need in captivity? That's the concern of primatologist John Mitani, professor emeritus at the University of Michigan, Ann Arbor, who has studied chimpanzees in the wild for more than 30 years. He notes that chimp groups in Africa regularly split apart and come back together, which they can't do in captivityand that even a large habitat like the one at Project Chimps can't match the more than 30-square-kilometer range of wild chimps. "Chimps like to come and go, just like people," Mitani says. Without that, he says, they can become anxious and violent-something even the best sanctuaries can't prevent.

AT THE END OF THE DAY, Ross returns to Project Chimps's main office to talk about next steps with Crumpacker. Photos of more than 200 chimpanzees hang on the wall, with black-and-white pictures denoting animals still at New Iberia. The research center still plans to transfer most of its 123 remaining apes here. "They have been quite diligent in their approach to the care of the chimps," says Director Francois Villinger.

Ross's review, announced earlier this week, turns out to be mostly good news for Project Chimps. The sanctuary earns a total score of 81 out of 100, with high marks for its large group sizes and exceptional outdoor space. But the report also dings the sanctuary for the apes' limited access to that space and for its relatively inexperienced veterinary and care staff.

"Based on the allegations, I went in pretty skeptical," Ross says. "But overall I think the chimps are well cared for."

Crumpacker says Project Chimps will "try and make strides" toward addressing the recommendations-although she isn't conceding every point. Ross recommends more scattering of food to better replicate natural foraging, for example, but she says hand feeding ensures that chimps get the right portions.

For his part, Ross says he will continue to refine his tool as he visits more North American chimpanzee sanctuaries, all of which have signed on. He hopes to expand the approach to other types of chimp facilities, and to eventually help create similar tools for monkeys, horses, and other animals.

Although Mitani doesn't think it's possible to give chimpanzees an ideal life in captivity, he welcomes Ross's attempt to improve conditions. "He's trying to make the best of a bad situation, so more power to him," he says. "Even if this tool just makes things a bit better, we owe these animals more than they have right now."

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