

LOCAL, STATE & REGION

Oregon Zoo polar bears help test new monitoring method

Laser technology may offer a noninvasive way to weigh bears in the wild

BY AUSTIN DE DIOS
The Oregonian

Two polar bears at the Oregon Zoo are helping biologists test new scanning equipment that could provide a noninvasive way to monitor bears in the wild.

Researchers from the U.S. Fish and Wildlife Service, U.S. Geological Survey and National Park Service tested the new state-of-the-art laser technology on Amelia Gray and Nora, according to the zoo.

While the bears were occupied with frozen treats to keep them in place, scientists trained the laser scanner on them from a roof above their enclosure.

“Nora and Amelia Gray were so fun to work with,” said Lindsey Mangipane, polar bear biologist with the U.S. Fish and Wildlife Service. “And their care staff did a great job getting them in a good position that we



could conduct the scans.” Researchers usually go out on the sea ice and capture wild polar bears in the spring to weigh them, but that has become more difficult with global warming, Mangipane said. The hope is to eliminate the need for the large metal tripod traditionally used to weigh the bears, which requires that they be captured and immobilized, according to Mangipane. Similar laser technology was used by the National Park Service to image brown bears in Katmai National

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— Lindsey Mangipane, polar bear biologist with the U.S. Fish and Wildlife Service

Park for Fat Bear Week, giving Mangipane and her colleagues the idea to adapt the laser imaging system to other bears in the wild. This is the first time the technology is being used on bears with known weights, allowing the team to accurately calibrate the laser technology, Mangipane said. Weight is a sign of good health in bears, and being able to track the weights of polar bears could provide insights on the health implications of climate change on the species, according to Mangipane. “A fat bear is a healthy bear,” Man-

gipane said. “It’s a really important metric we use as biologists to look at the general health of a population.” Amelia and Nora have been helping researchers for several years. Nora participates in research on caloric requirements for wild polar bears, spending time in a swim chamber designed to monitor her condition and movements, according to the zoo. Before moving to Oregon, Amelia was one of a few bears testing the Burr on Fur prototype designed by 3M to give scientists a better way to monitor wild bears, the zoo said. This isn’t the first polar duo at the



Polar bears Nora and Amelia Gray are helping researchers test new laser equipment designed to weigh bears in a noninvasive way. Dave Killen/The Oregonian

« Oregon Zoo polar bears Nora and Amelia Gray are helping biologists test a new method of monitoring bears in the wild using a laser. Michael Durham/courtesy of the Oregon Zoo

Oregon Zoo to contribute to science. In 2012, polar bears Conrad and Tasul became the first of their species to give blood without anesthetic — a breakthrough in improved animal welfare, according to Amy Cutting, interim director of animal care and conservation at Oregon Zoo. Tasul also worked with polar bear scientist Karyn Rode to provide more information about climate change’s effect on the diets of wild polar bears, and on developing a more accurate tracking collar, the announcement said. “We still have gaps in understanding how climate change is affecting polar bears, so it’s essential that the bears in our care help scientists learn more about their species,” Cutting said. “Zoo bears are perfect candidates to help because they already participate in many health-care behaviors voluntarily.” Oregon Zoo is a part of several studies with the Polar Bear Research Council. The council has released its 2022 Polar Bear Research Masterplan, providing a roadmap to critical studies for polar bear conservation.



« Polar bear Nora swims in her pool at the Oregon Zoo’s Polar Passage habitat. Michael Durham/Oregon Zoo

Investigation

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“It showed a guy leave the residence in a hurry, gather a bunch of stuff and running away,” Braden Inman said. Bend Police spokeswoman Sheila Miller said she could not confirm officers viewed footage from Leah Inman’s home, nor that it aided their investigation. “We’re using all investigative techniques available to us,” Miller said. By Tuesday afternoon, investigators had received warrants to search the residence.

Investigators wore booties over their shoes. A 3D-imaging camera scanned the outside of the home. Several prosecutors with the Deschutes County District Attorney’s Office were also at the scene. Many neighbors had not gotten much sleep the night before. Several were awaiting disaster cleanup workers to address water damage in their units from the sprinkler system. Residents of the Daggett Townhomes said many of them moved in when the apartments opened four years



ago. Many residents receive housing vouchers from the government. Nadine Harden said she had infrequent, though friendly communication with Ely.

« Leah Inman lives near the northeast Bend apartment where firefighters responding to a blaze found a body early Tuesday morning. Activity at the apartment that burned led her to install security cameras. Dean Guernsey/The Bulletin
“It was just the, ‘How you doing?’ ‘Looks like it’s gonna rain,’ the standard,” she said. “But there were times when he went off the deep end with the drugs.” Harden said the man hosted a bad element in his house since he moved in four years ago. A tenant found a bag containing heroin and needles in a bush near the house, she said. “It pretty much was a heroin house,” Harden said. “Really strange things would happen over there over the years. Really weird drug activity. You can always tell when there’s drug activity going on. Braden Inman was sleeping in a van outside his mother’s house at the time of the fire. “It’s pretty surreal,” he said. ■ Reporter: 541-383-0325, gandreus@bendbulletin.com

Graduation

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Moss, a senior at Mountain View High School, said he is grateful to have learned flexibility from the constant changes to his schooling due to the pandemic. But he said he felt angry that he missed out on so much. While stuck at home, away from friends, he kept in touch with them over 12-hour Xbox sessions, which eventually turned into long games of backyard football as pandemic lockdown measures loosened. “You look back on it now and those are some of the best memories I’ve ever made,” he said. “It was what we had and we were making the most of it ... I’m thankful for it, but I never wish I had to go through it.” In the final weeks of class, students said they have been trying to make up for all they missed out on, finding joy by spending time with the friends they were separated from, some of whom they may never see again. Rodriguez, a senior from Ridgeview High School in Redmond, said that this year he has become more involved in school than ever before, becoming band council president, joining the honors society and taking part in the school’s “Wizard of Oz” musical. Though his motivation to play trumpet dipped significantly during online school-

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ing, he found motivation from playing with his friends again, a community he had long been missing. “During that time, I grew as an individual,” he said. “Having that alone time was good. However, for the most part, I did feel quite down. I wish I could have had my friends with me. There were moments of sadness and moments of happiness.” For families, graduation feels like the finish line of a marathon. Allison Gardner is a fifth-grade teacher in Bend who coaches girls basketball for Bend High School and whose daughter, Peyton, is graduating this year. She said that while the pandemic kept them home, she bonded with her daughter over cooking meals, watching movies and chatting during their day-to-day routines. “It was a forced closeness, but it turned into something very genuine,” she said. “It



Graduates line up to receive diplomas during their commencement ceremony at Madras High School on Saturday. Ryan Brennecke/The Bulletin

brought us very close, mother and daughter.” Lately, Gardner has noticed a difference in her daughter, who stays home more these days. “It feels like I only had one real year of high school,” Peyton said. “It feels weird for me to be leaving home.” But Gardner said she’s nonetheless proud of the “grit and resilience” her daughter has shown while enduring a difficult school experience. “I have a lot of hope for her,”

Gardner said. The last two years have not been without accounts of resilience, of people lending a hand. “It could be easy to say, ‘I can’t take this anymore,’ but to see their resilience, choosing to participate, has been a joy to us,” said Madras Principal Brian Crook, who is finishing up his final semester in the school’s lead role this semester. “That’s what this class represents to us: resiliency.” Reed, the 18-year-old from Crook County, described pandemic schooling as “a major setback” that “made you work twice as hard.” He said his grades began to drop during online learning, and finances become a problem. For a time, college didn’t seem like an option. When he returned to school, he described a feeling of social anxiety. But halfway through his senior year, Reed found his motivation and decided to make a run for college. His principal helped him apply for scholarships and financial aid. He applied and was accepted to Eastern Oregon University. He’s unsure exactly what he’ll study there, but said he’s now interested in a teaching career. Credit the pandemic for that decision. “I’d like to help people the way my teachers helped me,” he said. ■ Reporter: 541-660-9844, bdole@bendbulletin.com