

# The Return of the Platypuses

Rescued from Australia's fires, a small fleet of wild platypuses is launched back into their wetland home and into an uncertain future.

Photographs by David Maurice Smith Text by Brooke Jarvis June 16, 2020



A sedated female platypus received a physical exam at the Taronga Wildlife Hospital in Mosman, New South Wales, Australia. She was one of three rehabilitated platypuses to be returned to the wild earlier this spring.

A sedated female platypus received a physical exam at the Taronga Wildlife Hospital in Mosman, New South Wales, Australia. She was one of three rehabilitated platypuses to be returned to the wild earlier this spring.

The platypus, liberated from the pillowcase in which it had been traveling, headed straight for water.

Sarah May, watching, marveled at its glossy coat and the smoothness of its movement. It was like a Slinky, she said: "It almost poured over the ground." The platypus reached the still pond, slid in, and was gone. Dr. May had been anticipating this moment for months, but now that it had arrived, she found herself surprised at just how deeply moved she felt.

The glossy platypus, along with two others, arrived at Tidbinbilla Nature Reserve, a 45-minute drive from the Australian capital of Canberra, on April 30. They had been away for four months, sheltering at a zoo in Sydney. The cold, wet and windy day of their release could not have been more different from the day in late December when they had left the reserve.

Back then, Tidbinbilla was parched from extreme heat and drought and menaced by an approaching bush fire. Dr. May, the wildlife team leader for the reserve, and her crew were working long hours in thick smoke, trying to protect their lungs with face masks, their eyes red and burning. It was a grim and apocalyptic-feeling time, she said: "Fires had taken over everybody's psyche." But the team worried most about their animal charges, the rare, endangered and iconic wildlife that make the reserve their home.

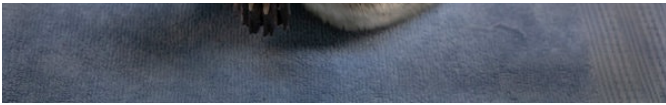


Claudia Bianchi, a zookeeper at the Taronga Zoo, during platypus feeding time last December. Seven platypuses were kept there to recuperate while drought and wildfires ravaged their habitats.



Robert Dockerill, right, of the Taronga Zoo, retrieved a male for a check-up before preparing him for re-release.





A sedated male receiving a physical.

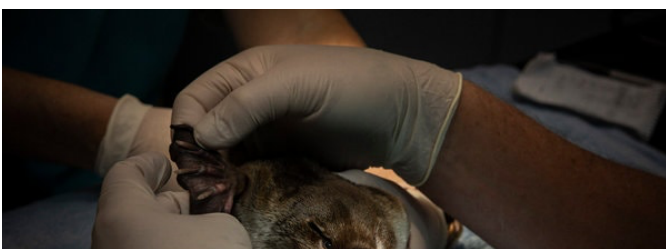
Tidbinbilla encompasses a eucalyptus forest, a broad valley full of emus and kangaroos, and a large wetland of ponds protected by a predator-proof fence. But in December the wetland, known as the Sanctuary, no longer resembled its name. Animals came to drink and forage from shrinking, muddy ponds, which were surrounded by large areas of dried, cracked earth. Dr. May watched as water birds tried to swim through mud but ended up walking: The ponds were shallower than their legs were long. She feared that only a few days or weeks of water remained.

The reserve contacted Taronga Zoo, in Sydney, asking if it had space to shelter its platypus population, aware that the animals would be unable to survive without their ponds. Taronga, which lists the platypus as one of the “legacy species” it considers crucial to protect, was fielding similar requests from other conservation agencies, as well as farmers and landowners who saw platypuses struggling in drying creeks and ponds. “We were inundated,” Phoebe Meagher, the zoo’s wildlife conservation officer, said — but unfortunately, there was only so much space to house them.

The zoo agreed to send a rescue mission to Tidbinbilla. Because platypuses are active at dusk and at night, the team worked in darkness; the smoke was so thick that it was hard to breathe and the beams from flashlights looked like lightsabers. After hours of trapping, they had caught seven platypuses. “The rest would have to take their chances,” Dr. May said.



A female platypus is given a full physical exam at the Taronga Wildlife Hospital by Taronga’s senior veterinarian, Dr. Larry Vogelneust, and senior veterinary nurse, Liz Arthur.





Platypuses are unique among mammals: venomous and egg-laying. Dr. Dockerill has described them as “Dr. Frankenstein’s first attempt.”

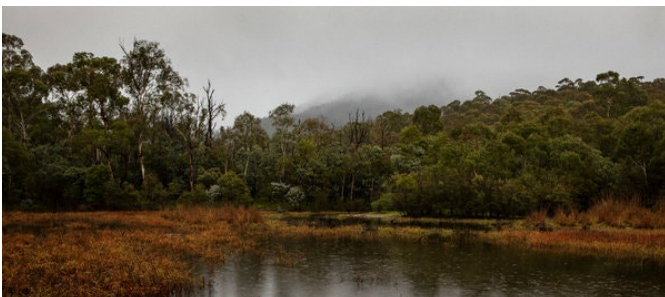


Ms. Arthur placed the platypuses in their bedded cages for transport to the Tidbinbilla Nature Reserve for release.

In the following weeks, as the fires moved toward Tidbinbilla, the reserve looked for other temporary refuges to which it could evacuate its animals. Eventually, it moved six koalas; nearly 1,000 endangered northern corroboree frogs; 22 especially precious brush-tailed rock wallabies, whose genetics are key to a breeding program meant to reestablish a population that is nearing extinction in the wild, and 26 endangered eastern bettongs, which already went extinct on the mainland but are being reintroduced. (In the end, the reserve did not burn). At Taronga Zoo, keepers were careful to keep the relocated platypuses wild: limiting their interactions with people, making sure they still had to burrow and catch their own food. The zoo also began to make plans for housing larger numbers of platypuses, should the need for evacuation arise again soon — something that climate projections suggest is likely.

And then, at last, rains returned, although they came so heavily that flash floods tore through fencing at the top of the Sanctuary. The ponds of Tidbinbilla refilled. The reserve tested the quality of the water to make sure it was not contaminated with fire retardants, and did surveys to make sure the ponds still held enough food. Finally, it was time to release the first round of platypuses and watch how they fared.

The platypuses arrived in a van and were checked by a vet. Then the zoo keepers who had taken care of them for the months of their exile released them into full ponds, edged with greenery, that looked little like the ones they had left. Just before the release, the rain and wind stopped and the clouds parted to let sun shine on the water.





Tidbinbilla Nature Reserve is a 21-square-mile protected area about a 45-minute drive from Australia's capital, Canberra.



Tahneal Hawke, a Ph.D. student, prepared an acoustic monitoring receiver that would be placed in the water at the reserve and help researchers track the tagged platypuses.



Dr. Sarah May, the wildlife team manager of the Tidbinbilla Nature Reserve, collected data from one of the acoustic monitoring receivers.

The returned platypuses were plumper, and different in another way as well: They'd been implanted with tracking devices as part of an ongoing study to better understand how platypuses behave, how they respond to changes in their habitats, and how they are faring in Australia — which is still a very open question, explained Gilad Bino, a researcher at the University of New South Wales who will be monitoring the Tidbinbilla platypuses. "Everyone seems to assume that if it's out of sight it's probably doing OK," he said. But his research suggests that platypuses, thanks to unsustainable water use and climate-driven drought, are actually in considerable trouble: extinct in 40 percent of their historical range, with bigger losses coming as climate change intensifies.

Tahneal Hawke, another University of New South Wales researcher, recently analyzed nearly 26,000 records of interactions with platypuses, going back to 1760: newspaper articles, explorers' journals, books of natural history. The results, for modern platypus researchers, make for surreal reading. Dr. Bino was struck to read about people seeing (or shooting) platypuses by the dozen, or using terms like "trach" or "bixiation." "I would never in our

the dozen, or using terms like mob or migration. I would never, in our years of studying platypuses, describe them that way," he said.

The final four platypuses returned to Tidbinbilla on June 5. Their receivers, Dr. Meagher reported, "are tracking them happily moving about the ponds." People who saw the platypuses slip into their recovered habitats described doing so with a feeling of relief, even of magic, after a painful summer. But Dr. May can't shake the memory of those desperate days in December, when the air was orange and the bush cracked with dryness. And Dr. Bino warns that the story of happy news disguises a more alarming larger picture. "Rescuing platypuses from drying ponds is not really a viable strategy" for the survival of the species, he said. But the way things are going, he is sure that more rescues will be necessary.



Dr. Bianchi released one of the female platypuses into the pond.



Zoo and reserve staff watched the newly freed platypuses.

