

Climate Change: The ripple effect on water resources and key species - koalas, bees, and elephants.



Photo: Laura Fox / © IFAW

Rafa climbs a tree in his pre-release site after being rescued and rehabilitated by IFAW vets in New South Wales, Australia.

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Two elephants enjoying water at one of the watering holes in Hwange National Park, Zimbabwe.

The Climate is Changing—So Can We

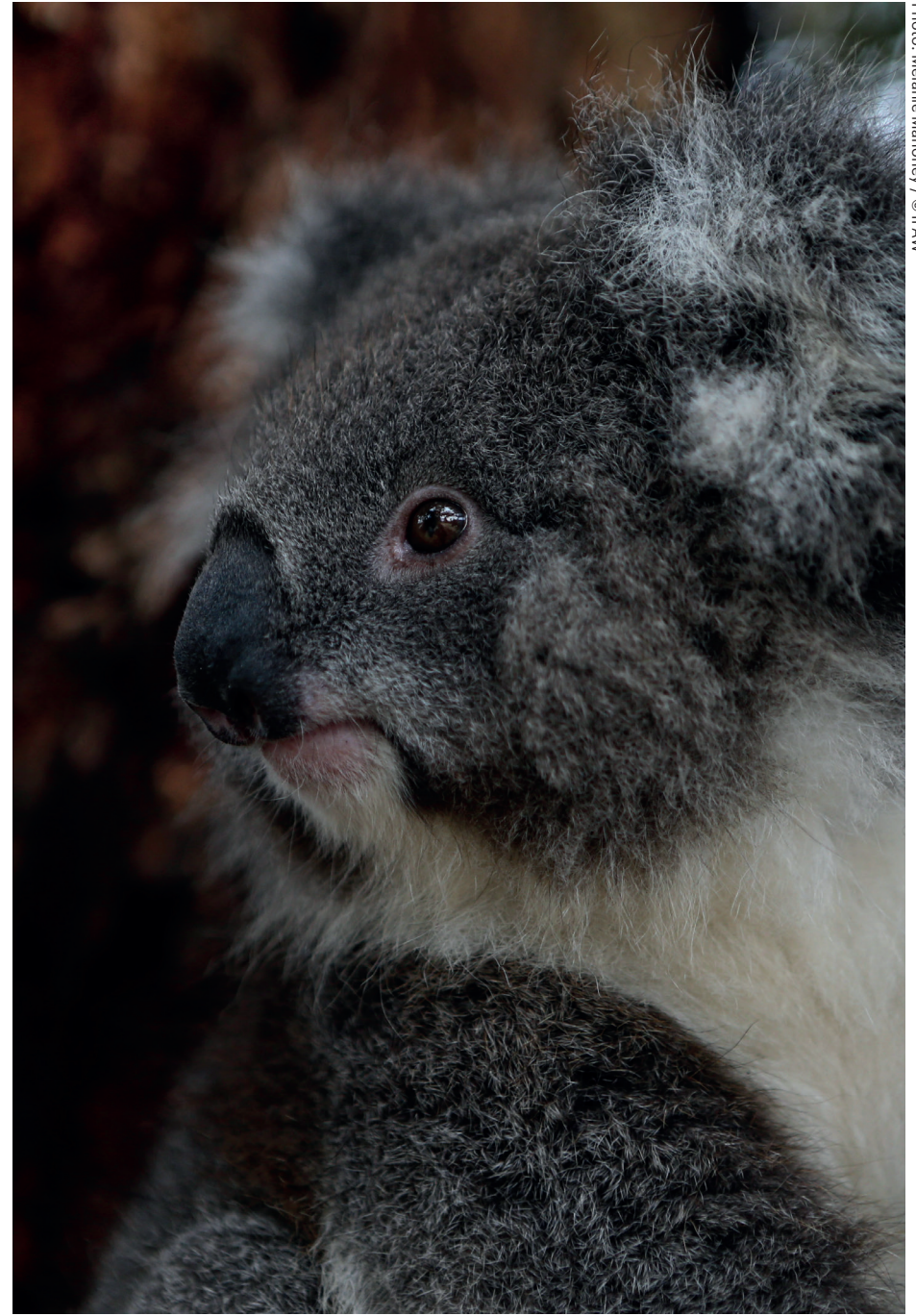
Every animal needs water; it's the most basic need. Right now, we are seeing how the impact of climate change threatens the availability of water. For example, droughts in Australia are leading to an increase in bushfires, destroying the habitat of koalas, one of the country's most popular native animals.

But some animals can change their ecosystems to help them fight back against global heating. These animals are ecosystem engineers: they alter ecosystems in ways that help support other species and can help reduce the detrimental impact of global warming. Elephants are an example of such a species. Their grazing helps keep forests healthier — able to absorb more carbon, and their dung

helps spread tree seeds far and wide.

Although they can help address this issue, elephants are still not immune to its consequences. They may be able to assist their ecosystems in withstanding the impact of climate change, but they, like koalas, are also still impacted by its dire effects, particularly as watering holes dry up.

The time has come for us to face the enormity of this problem, and to recognize the value of animals in helping alleviate the climate crisis. Nature-based solutions are critical in tackling this issue head on and that is exactly what we have done with YOUR help. **Your support and generosity has enabled us to erect miles of natural, elephant-protecting borders in Malawi, plant over 89,000 trees for koala habitat in Australia, and so much more.** Thank you for helping us address this crisis.



A koala rescued from the bushfires in rehabilitation sitting in a tree in Tracey Wilson's yard. The tree serves as a soft release site for the koala until it's healthy enough to be returned to the wild.



When Chikolongo Livelihood Project employees, Justin Mapira and Rodrick Juan, want to populate a new hive, they first hang it in a tree, in what they hope is the flight path of a colony of bees. Once bees have moved in, they take it down and bring it to the Chikolongo Livelihood Project apiary.

The Elephants and the Bees

Elephants are an example of ecosystem engineers. Their actions are directly responsible for providing other animals easier access to food. Climate change is threatening this symbiotic relationship between elephants and their ecosystems.

Last summer, we told you that **Water is Life** for elephants. They drink up to 50 gallons of water a day — their lives depend on access to plentiful water. To satisfy this need, they are forced to go in search of new watering holes that have yet to dry up. Global warming-induced droughts mean that the watering holes are becoming

farther away and fewer in number. Unfortunately, these excursions are longer, but necessary, and unknowingly lead elephants into high poaching areas or into conflict with people. They need more **Room to Roam** freely and out of harm's way.

Bee borders

To protect these herds and communities, a simple, but effective solution has been established: beehive fences. As with many humans, African elephants are terrified of bees and will avoid them at any cost. Beehive fences have been erected around the eastern border of Kasungu National Park in Malawi to create a natural barrier between elephants and potential



Elephants at the edge of a watering hole in Hwange National Park, Zimbabwe.

danger. In this way, bees are protecting the elephants from possible conflicts with humans and from straying into areas where they might be poached. The bees allow the elephants the opportunity to continue performing vital ecosystem-benefitting tasks in these areas, safely.

Along with beehive fences, your support for our Room to Roam campaign has led to an additional 465 square miles of land being secured for improved protection and management, where elephants have space to roam freely.

Water for all

While bees are an effective way of protecting elephants from the threat of poachers or conflict with people, we also need to address one primary reason elephants roam: the search for water. When we told you last year that elephants needed more access to water to survive, you answered that call for help and we started working immediately. **You are the reason we've had a successful start in implementing these ambitious and vital goals.**

In Zimbabwe alone, we successfully:

- ▶ Drilled nine new boreholes.
- ▶ Solarized one existing borehole.
- ▶ Revitalized a watering hole with a volume capacity of about five Olympic sized swimming pools.

New and improved boreholes in local communities, ranger stations, and campgrounds are having a tremendous impact. The boreholes improve access to clean water, enhance hygiene, sanitation, and help redirect costs towards other wildlife services. The watering hole in the Nyamandhlovu Pan of Hwange National Park is a critical waterhole for wildlife. There was little available for 20 years, but is now filled with the help of a borehole and seasonal rains.

By providing accessible water sources for elephants, you are helping ensure the survival of wildlife and protecting both animals and people. There is still so much that needs to happen, but thanks to your support, it is being done. Thank you!



The IFAW team with landholder, Liz Wilkie, planting some of the 3,500 saplings at the IFAW and Koala Clancy Foundation tree planting near the Moorabool River in Victoria.

Koalas and Bushfires

One of the most identifiable consequences of climate change is an uptick in the number of floods and droughts. The droughts, natural disasters in their own right, are doubly problematic as they lead to wildfires. Bushfires in Australia are starting earlier and have become more destructive as climate change worsens. The Black Summer of 2019-20 left parts of Australia so devastated that they still haven't fully recovered. In the case of koalas, it wreaked havoc on a species that was in an already precarious spot as their populations have been steadily declining for years.

From the ashes

With such severe devastation from the Black Summer, people like you stepped up to provide help when it was needed most. From rescuing individual animals like Ember, who was rescued in New South Wales after devastating fires swept through the area, to advocating for the species, you provided IFAW with the ability to work for the betterment of

koalas around the country.

For two years, our Australian team worked hard to get koalas up-listed from Vulnerable to Endangered. This reclassification means more funding will be allocated to the protection of the entire species.

But protecting those who survive the annual bushfires won't be enough. With their habitat destroyed, they will be far more susceptible to the next natural disaster that strikes. Thanks to your support, IFAW, along with the Koala Clancy Foundation, has addressed this issue by planting thousands of trees on a historic sheep-grazing property, located in a premium koala habitat zone with the hope of bringing the iconic species back to this region of Australia. **3,500 saplings have already been planted, and a further 2,500 will be planted later this year alone.**

► Overall, **89,000** trees have been planted in Australia last year with **7** partners and more than **238** volunteers across four states.



Ember perched on a tree post-release at the Treetops property of Dr. Roslyn Irwin in Caniaba, New South Wales.

Be the change

Climate change threatens us all, and it will take all of us to help alleviate its effect. Animals both big and small, from the mighty elephant to the tiny bee, are all suffering from these changes. They need clean and accessible water that climate change is denying them. They need habitats that are stable and healthy. With your help, we are doing everything we can to make sure they get that.

Thank you for helping us work around the globe, in the areas most at risk, to tackle the climate change crisis. Communities and people are at the core of all of these projects. If we are going to protect animals and protect ourselves from the dangers of global warming, we must work together as one. Thank you for your continued support—it truly makes a difference, as you can see from this report.



Elephants drink at a watering hole in Hwange National Park, Zimbabwe.