2020

Species' Stories:

Protecting species every day

If species could speak in our language… What help would they request?

COLLABORATIVE STORYTELLING

ICON SCIENCE
INTERDISCIPLINARY CONSERVATION

Where did my cool forest go?

Story by: Fiona Hoegh Guldberg, June 2022

I am extremely white, fluffy and endangered. I live in the high canopy of Daintree Rainforest. I eat the leaves, flowers, stems, fruits and nuts of the many rainforest trees. But my water can only come from clouds or the food I eat. At certain times of day, big clouds sit over my home and leave water droplets on leaves; and rain that falls in streams that cool the pockets of high-elevation rainforest where I live.

Every summer now, the forest has become very hot. There is a very hot heatwave that lasts several days. I crawl to find a pocket of forest by a stream to cool down…but lately, it is not cool enough. When I get too hot, I climb higher to find the cooler spots of the mountain, but I am running out of space to go to.

If the temperature reaches over 30 ℃ for too long, I will overheat and die.

As I climb higher and higher each year, the leaves I eat are more bitter. I get all my hydration from leaves, but the poor soils at elevation cause trees to put more toxins in their leaves. If I eat too many, I will be poisoned… but every year I am thirstier and need more water to cool myself down.

I need humans to help me and protect my forest and its connections to the streams and clouds. This will help me stay cool. If heatwaves continue to get hotter, longer, and more intense, I think will run out of cool places to hide; or mountain to climb. I will have to eat the poisonous leaves.

Threat: Climate Change, some scientists say that a 0.8 increase in temperature might be to blame for this species disappearance.

Biodiversity enhancing actions: Take effective and decisive action to minimise climate change.

Inspiration: My family and I visited the Daintree Rainforest several times when I was growing up, and I was always fascinated by its lush and wild, ancient beauty. The fact that it is some of the oldest rainforest in the world, and that its residents (possums, flying foxes, birds, butterflies, frogs, silk ants, tree kangaroos and cassowaries etc.) could all be facing such sharp declines because we have collectively damaged our climate, is a tragedy.

By my eyes, I'm a Fly!

Story by: Katherine Berthon, June 2022

They see me pass by, with a flash of yellow and black, as I zigzag through the sky. But it's a case of mistaken identity. By my eyes, I'm a fly! Not a bee, not me! Not a wasp either.

I stop to hover over flowers, dancing with a delicate courtesy, as I lean in to taste the flower with my feet. But you shoe me away and bring out the spray, as I move to make my getaway.

As I flee, there is pollen on my knee, and I don't stop for a second to clean it. It is far until I find the next flowers, moved by the wind past giant grey towers, I pass endless grey instead of green.

When I find the next daisy, I stop for a rest, and clean my legs, soaking up the warm sun as it lowers in the sky, to get the strength to survive the cold night ahead. I'll find a cosy nook, in a dense and scraggy bush and wait out the cold of the night. Your neighbour kept their garden clean; their hedges trimmed their pests controlled. No aphids for my offspring, they had flowers but without nectar. But your home has made a home for me, with native plants, carefully chosen, dense foliage without rows and many, many nectar-rich flowers.

Threat: Low greenery and impervious surfaces have rendered urban areas into an almost 'flower desert' for many pollinators and removed other leafy shrubs that I can use lo lay my eggs.

Biodiversity enhancing actions: Add diverse native understory vegetation with nectar-rich flowers to your balconies and gardens. You will also benefit from their role as a natural pest control.

Inspiration: My PhD research studies factors influencing plant-insect interactions in urban greenspaces and hoverflies are one of the most conspicuous but misunderstood urban pollinators. They can be found foraging anywhere there is enough flowers and have been seen foraging many stories high on green roofs.

Source: Berthon, K., Meyer, S. T., Thomas, F., Frank, A., Weisser, W. W., & Bekessy, S. (2021). Small-Scale Habitat Conditions Are More Important Than Site Context for Influencing Pollinator Visitation. Frontiers in Ecology and Evolution, 544.

The bird that lost its song

Story by: Cristina Hernandez-Santin, June 2022

I'm standing on the branch of a beautiful Eucalyptus tree. My feathers, black at my head, yellow dots around my chest. My parents are no longer around, but I remember their stories 'I courted your mother with my song!' I heard all too many times, but by the time I was ready to learn this song, I was all alone.

I listen around me… and close to me I can hear an interesting song '*chee-whip*', '*chee-whip-will*'. It is coming from a beautiful grey-brown bird with blue facial skin (little friarbird). I've seen them around, maybe I can try their song? I sing and sing but no female wants to be my mate… I must find another song!

I fly around and see another bird that looks a little more like me. He is smaller than me, with a bright pink bill, brown wings and brown dots along the chest. His voice rises in a melodious song that says '*quip kpeer kpeer kpeer quipip quipip quipip'* (spiny-cheeked honeyeater). I listen and emulate, singing with all my might, but still not female of my own will look at me.

What will it take to find my mate?

As the next morning dawns on the forest, I hear in the distance a chattering song. '*quorrick, quorrick, TIK*'. I am drawn to this sound and as I get close, I finally see another bird like me.

This is it! This is the song I should sing. I learn this new song and join my voice to the chorus and finally a beautiful female looks my way. I have found a mate.

Threat: About 27% of regent honeyeaters are singing songs different from their own. Imitating other birds and showing lower reproduction success.

Biodiversity enhancing actions: Their habitat must be protected and particular their breeding sites in NSW extended.

Inspiration: I was reading a paper highlighting how the regent honeyeater song resembles that of other species in the surrounding areas rather than that of their own species. The songs of this birds in different areas across NSW and Victoria closely resemble the eastern rosella, little wattlebird, little friarbird, spiny-cheeked honeyeater, black-faced cuckoo shrike, noisy friarbird and pied currawong.

Source: Crates, R., Langmore, N., Ranjard, L., Stojanovic, D., Rayner, L., Ingwersen, D., & Heinsohn, R. (2021). Loss of vocal culture and fitness costs in a critically endangered songbird. Proceedings of the Royal Society B, 288(1947), 20210225. Small-scale habitat factors are more important… frontiers in ecology and evolution investigates insect-plant interactions

Why so bright, why so fast?

Story by: Marco Gonzalez, June 2022

It's the middle of the day, but I'm snoozing. I'm perching on a branch and snuggled with my partner. Keeping close contact to each other is very important to maintain our lifelong bond.

Our camouflage is on point. I like high trees, but smaller ones will do too.

I wait till it's dark… and now it is time to find food. They live mostly on the ground. Reptiles, frogs, and insects will all do to fill me up.

Other species complain about city lights, but I might find it advantageous to my prey. Bright lights attract many things that I can eat.

But some lights are on the move, and I've been hurt before.

Why do they have to move so fast? And why do I keep chasing them?

If only they slowed down, I'd be able to get away unharmed.

Threat: Car-wildlife collisions are relatively common for this wonderful bird because they are not fast enough to move away. In cities they also have a high-risk exposure to pesticides and being preyed upon by domestic pets.

Biodiversity enhancing actions: Lower speed limits on local roads
Keep cats indoor and other pets contained.

Inspiration: During the endless lockdowns, a couple of tawny frogmouths nested on a tree next to my apartment. Seeing them every day and eventually their chicks brought me joy during a difficult time.

If nets were gone…

Story by: Casey Visantini, June 2022

I swim around the expansive ocean moving swiftly around in complicated manoeuvres. Foraging in the open water searching for schools of fish to fill my belly. But I'm always on the lookout for large creatures. They consider me food.

When I get tired, I seek out pockets of kelp to rest and shelter. The kelp forest allows me to float in stillness.

Safety! This kelp forest is a safe place to rest. My fur helps camouflage me while I am here at the ocean floor. And when I am in the surface, the rocky outcrops supply both sun and shelter. A place to digest these yummy fish. But food has been getting scarce for me lately.

Every day these large floating structures come into my land and drop some nets taking fish away from my hunting ground. I've heard they are called boats.

Fish are not recovering as fast as they should be. I remember times before when I tried following these nets and use them to catch a meal of my own. I got stuck and barely made it out before drowning. Others have been less lucky

Perhaps if the nets were gone my food would return?

Threat: Overfishing is depleting many fish resources around the world that many marine mammals depend on for sustenance. Animals like the seal is also a common by-catch for fishing boats.

Biodiversity enhancing actions: Reduce your fish consumption to reduce demand for this resource.

Inspiration: This is the only non-Australian species in these stories, but I used to volunteer at the Marine Mammal Centre where we rescued sea lions and seals. These creatures will always have a special place in my life.

Grey-headed flying-fox

Pteropus policephalus

Photo by Nick Edards

From roost to roost I fly!

Story by: Pia Lentini, June 2022

I open my eyes and the world welcomes me from my upside-down view. Surrounded by my camp, I feel safe and warm. I listen to their incessant chattering… a more comforting sound I shall not find.

Dusk is approaching and we stretch our wings getting ready to fly.

During the day we rest, at night we fly. Searching for delicious blossom, pollen, and nectar. These sugary treats fill me with energy for my long flights.

Today, I am hungrier than ever. I am pregnant and every one of us counts. In recent times heatwaves stronger than ever have killed many of my kind. Last year we lost thousands in a single hot day. My pup and every other pup we birth are the key to save our kind.

At the distance, I spot a small boat approaching the roost. It is people again, they come often to watch our mass departure from our roosting land. I do believe you will not find a more wonderful sight.

As we start flying, their faces fill with wonder. They awe at my great size… did you know I am the largest of my kind?

I fly across the landscape in search of some sugary treat and find some wonderful trees.

I dig right into the banksia flower and some pollen sticks to my face and chest. It is all good, later I'll have time to groom. I leave this tree in search for the next one. I find a large expanse of burnt land. Fire devastated the area not long ago and many of us were lucky to escape unharmed.

I find a new tree, eat some more and clean myself, leaving behind pollen at this new tree. The few surviving trees thank me. My actions today will help these land recover from the fires.

As dawn approaches, I follow my nose to the closest 'camp'. This roost is a different one. But I'm not fuzzy. I like to travel, and as long as I have a safe roost to settle and a 'camp' surrounding me I know that I will be alright.

Threat: Most of their habitat has been cleared post-colonisation, the fragmented forests make me more vulnerable to climate change and heatwaves are known to kill hundreds and even thousands of bats

Low breeding rates make the species more vulnerable to environmental changes and the population recovers

Biodiversity enhancing actions: Plant native trees in your garden and streetscapes, there are more that 140 species to choose from including Eucalyptus, bottlebrushes, banksias and wattles.

Get to know and appreciate the species and spread their role: this bat is a super pollinator and plays a critical role to maintain ecosystem health and aid recovery from disasters such as fire.

Inspiration: I love bats and are constantly trying to bring people's attention to how wonderful these animals are. Many people consider them a nuisance or 'ecological-disservice' as they associate them with diseases or feel impacted by the noise and smell surrounding their roost. But I believe that if people learn about these animals, they will learn to appreciate them for who they are as well as for their pollinating superpower.