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Cofunded by the European Commission. With the contribution of the Green Fund. Supported by the A.G. Leventis Foundation and the Stavros Niarchos Foundation.



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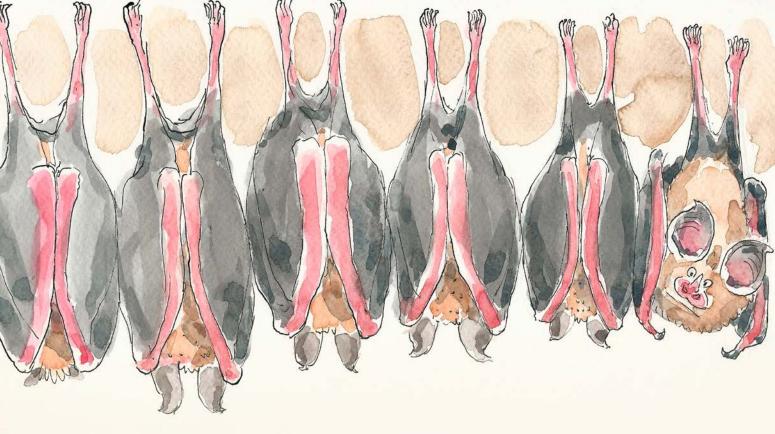








MINISTRY OF ENVIRONMENT AND ENERGY



Shhh! During the day I'm sleeping

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LIFE17 NAT/GR/000522 GRECABAT "Greek Caves and Bats: Management Actions and Change of Attitude" ("Έλληνικά Σπήλαια και Χειρόπτερα: Διαχειριστικές Δράσεις και Αλλαγή Συμπεριφοράς") Program

It's getting dark. Time to go home, time to go to bed...

But for some, it's time to wake up and have breakfast...

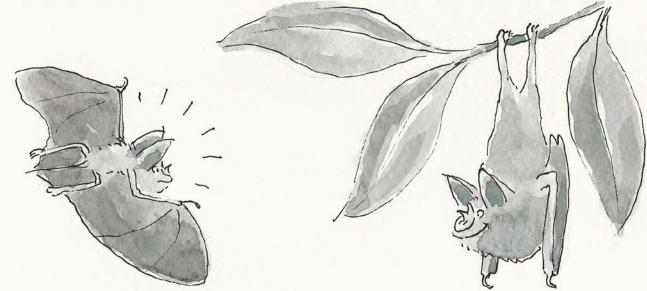


The lesser horseshoe bat used to spend the warm nights... eating.

He flew around the bushes squeaking "ii… ii… ii… ii…" and if he happened to listen to the echo bouncing off from a mosquito or a small fly, he would fly back and snatch it in.

"What a life!", he screeched between his bites.





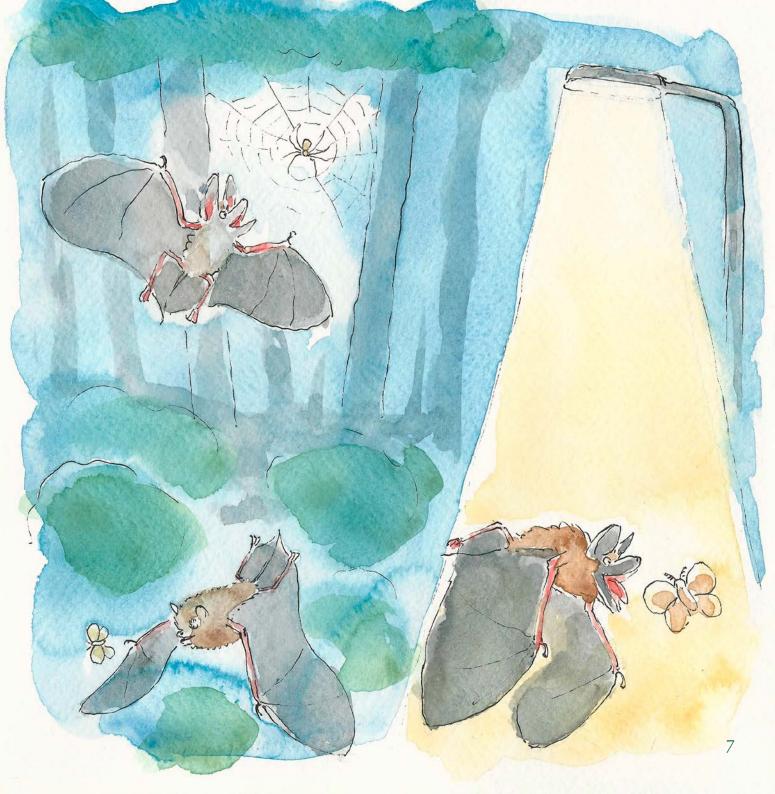
"iiiii... iiiii... iiiii...,

if you want to have a full stomach, you have to eat large moths", chirped the great horseshoe bat who hung from a tree branch. And then flew off to snatch a passerby moth and went back on the branch to munch on it.

"Er...er...er..., don't eat a flyer, eat a walker...er", exclaimed the the mouse-eared bats from the woods, then pricked up their mouse-like ears to listen to the spiders walking on the leaves or the millipedes crawling along the grass.

"Snaa...aaa..., snatch it fast and don't wait for it", clicked the bent-wing bat hopping from tree to bush and from fly to moth.

"Wow...wow..., seize all opportunities, you can't have the same meal every night", mumbled the serotine bat who decided to leave the large beetles alone in their meadow for tonight and instead preyed on the large moths flying under the lights of the streets.



Dawn arrived and all the bats went to sleep. Where? In the quietest, most secluded, darkest place of all. Their cave.

60



"Splish...splash", dripped the water from the stalactites.

The bats avoided them by listening to the echo of their voice, then flew over to their favourite roosts, where their hungry baby bats were waiting for them.

They hang upside down from the roof -each horseshoe bat on its own, the mouse-eared bats right next to each other, the bent-wing bat and the serotine squeezed inside holeswhile bat mums let their babies cling on them to suckle.

On the ground, a group of cave crickets, woodlice, centipedes and millipedes were walking, preying or munching on a thick layer of guano (bat manure).

And they slept happily ever after... Until...



Disaster!

One day, a bright light lit up and a group of humans entered to admire the cave.

"Wow!!!" they exclaimed,

"What a miracle! Everyone should be able to enjoy this. We can place lights inside and come every day".

And so they did.





"What a fuss", screeched the lesser horseshoe bat.

"It's busy all the time", the mouse-eared bats complained.

"The babies can't rest with all this light", muttered the serotine bat.

They took a flight across the cave, from end to end, until they found a quiet little corner.

And under the bats, all the crickets and the woodlice and the millipedes squeezed along too.





Dusk came.

The bats flew over the heads of the humans and squeezed out to exit from the new door.

They were starving. They hadn't eaten all day indeed. Thankfully, the night was theirs to forage for their food.







Dawn arrived and the bats returned to their cave, but they found the door closed.

"What now? Where are we going to spend the night?", fretted the lesser horseshoe bat.

"Let's take off to this old house", said the greater horseshoe bat.

But first, the mouse-eared bats and the serotine bat, they had to sneak into the cave and get their babies. It was very difficult, but they made it.



This old house was abandoned for years. The wind, the light and the bats, they all slipped into the house through a broken window.

The bats flew over to the darkest of rooms, each of them picking their own corner, and slept hanging from the ceiling or inside the fireplace or behind the door, under the bed even.

And so they spent the whole summer there, until their babies grew up.



Winter arrived.

The wind and the rain slipped into the house through the broken window.

"I am getting wet, I need to squeeze in with you", snarled the lesser horseshoe bat.

"This is so jammed, I am used to sleeping alone", said the greater horseshoe bat.

"What are we going to do? Spring is still far away!", muttered the serotine bat.

"Let's go back to our cave", they all screeched.



Back in the cave, something had changed.

A sign said "Bats! Come over!",

"Warning! Bats inside!" said another one.

"There is no door!", screeched the lesser horseshoe bat.

"There is a fence with railings", said the mouse-eared bats.

"Look, I can fly through the railings", uttered the serotine bat.

"Let's go to bed!", they all said and went in.



But something had changed inside the cave too.

"Deep inside, it's still dark", screamed the lesser horseshoe bat.

So they settled there and tried to sleep. And all the crickets, the woodlice and the millipedes squeezed along under the bats, without which they were really starving. "Some humans are looking after our cave", said the lesser horseshoe bat. "If only they looked after our trees too...", complained the greater horseshoe bat. "...and our moths...", added the serotine bat. "Shhh! We want to sleep!" they all cried out together. And they slept happily ever after.



The bats:

- Contrary to the flying squirrels which are gliding, bats can actually fly.
- Their wings have a thin membrane of skin which spreads across their body connecting the fingers of their "hands" with their legs and tail.
- The live up to 10-40 years, more than most little animals (mice live up to 5 years, little birds up to 10 years).
- They give birth to 1-3 babies (bat species appearing in the story have only one) and they nurse them until they are able to fly.
- They use echolocation (sonar) to find prey and navigate by using very short and highpitched calls (ultrasound, at frequencies above human hearing) and by listening to the echo bouncing off.
- When they can't find and catch prey insects, they go into torpor (a state of decreased physiological activity).
- They belong to different species (35-36 species in Greece), each of which has their own special preferences in terms of insect prey, foraging habitats and roosting sites..

"We are five Rhinolophus species and **our voice comes from our nose** (it looks like an antenna), we prey in open habitats and we sleep wrapping our wings around our body". "We are ten Myotis species and we all hunt around trees –or underneath them– and we all sleep together, right next to each other, inside caves".

Horsehsoe bat

Serotine bat

(Eptesicus serotinus)

"I am the largest of all, I am hunting in open spaces (or street lights) but in fact I can sleep inside quiet rock or wall crevices".

"**My long wings** allow me to fly fast and I hunt at sparse trees or bushes, or I prey on moths under the lights of the streets. I like to roost with other bent-wing bats".

Mouse-eared bat

Bent-wing bat

(Miniopterus schreibersii)

Cave-dwelling invertebrates:

- They belong to different groups of animals, each of which with multiple species living inside and outside the caves.
- ➤ Some species are "trogloxenes" (they use caves as shelters or to nest), other species are "troglophiles" (they live inside or outside the caves) and some others are "troglobites" (they permanently dwell deep inside caves)
- ➤ Instead of eyes, troglobites use their long antennas to "see" in the dark. They have lost their colour because they have no need for camouflage.
- A troglobite species evolves in a single or just a few caves within the same area and that species cannot spread to other caves in the world.

Springtails

"We have six legs and we use our tail to hop along, we live in soil and we are so many that we can't be eliminated by pseudoscorpions".

Nematode

"Yes, I am a worm and I live inside crickets or spiders, but I also have countless tiny relatives who live in soil".

Snail

"I live inside and outside of the caves".

Cave-dwelling isopod

"I have 14 legs and gills (just like my cousin, the shrimp) but I live in caves and feed on dead plants matter and guano" (guano = bat manure).



Cave-dwelling beetle

"I am a fast hunter and my color is black because black jaws are stronger".

Cave-dwelling cricket

"I have beautiful long antennas and legs that help me navigate through the dark cave, my home".

Pseudoscorpion

"I don't have a stinger but I am a fierce hunter and I feed on tiny creatures which are smaller than me".

Centipede

"I sleep under stones and I run to catch tiny animals, inside and outside the caves".

Myriapod (millipede)

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"I have more legs than anybody else, but I don't have to run at all because the dead plants or animals I feed on do not walk".

Spider

"Eight legs are enough to snatch tiny little animals in the dark"

Harvestman

"I occasionally visit the cave to hunt, but I don't live here"

Gart

Cave-dwelling

amphipod

ponds inside caves".

"My relatives live

on the beach but

I only stay in small

Us and caves

- ➤ With their beautiful halls and their unique, cave-dwelling creatures, caves are nature's legacy to us.
- Caves are cultural heritage sites, with prehistoric findings, ancient sanctuaries and innumerable legends.
- Caves and subterranean rivers are routes of the water towards springs, wetlands, the sea and our homes.

What can we do?



➤ Let's stay near the opening of the cave to avoid disturbing the inhabitants inside.

➤ Let's limit the time we spend inside a cave to minimize disturbance to its inhabitants.





➤ Let's take our trash with us when we leave the cave.

Let's not destroy stalactites, let the next visitors enjoy them as well.





Let's not pollute the water that ends up in caves, it's a supply for springs.

➤ Let's not alter cave openings, their inhabitants may not be able to survive it.

