

WHAT IS LIGHT POLLUTION?

Lighting at night is needed so we can walk in the city and work and have fun in the evenings. But we often use outdoor lighting excessively and **we use unsuitable luminaires that shine into the sky and emit white light. The lighting is often too strong and placed even where it is not necessary.** Thus, we contribute towards the increased illumination of the night environment which is called light pollution. Because there is an increasing number of luminaires around us, we can no longer see the stars, and the light coming into our bedrooms is disturbing our sleep and affects our general wellbeing and health. Due to excessive lighting, we use more money for electricity and at the same time also disturb the other inhabitants of our planet - the animals.

TEST YOUR KNOWLEDGE

1.) Connect the words that belong together:

- | | |
|---------|---------------------|
| a) bat | 1) plant pollinator |
| b) moth | 2) night sky |
| c) star | 3) mammal |

2.) What is light pollution?

- a) the flashing of colourful lights in night clubs
- b) artificially increased illumination of night environment
- c) full moon moonlight

3.) Encircle which lamp in the picture is environmentally suitable and describe why.

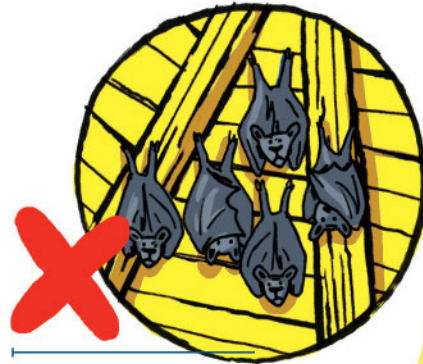
- a) fully shielded lamp
- b) partially shielded lamp
- c) unshielded lamp



Answers: A3, B1, C2; 2B; 3A.

BATS IN THE ATTIC!

Bats are often described as not a bird and not a mouse. But in truth they are more closely related to mice than birds. They are mammals and their pups feed on their mother's milk. They are born in big nursery colonies - as the groups of bat females are called, who often seek shelter in attics and in church towers during the summer. There they raise their offspring in warmth. They sleep during the day and in the evening they go hunting for insects. They are the only mammals that can actively fly. In the evening, they fly out of small windows, dormers and roof openings and into the night.



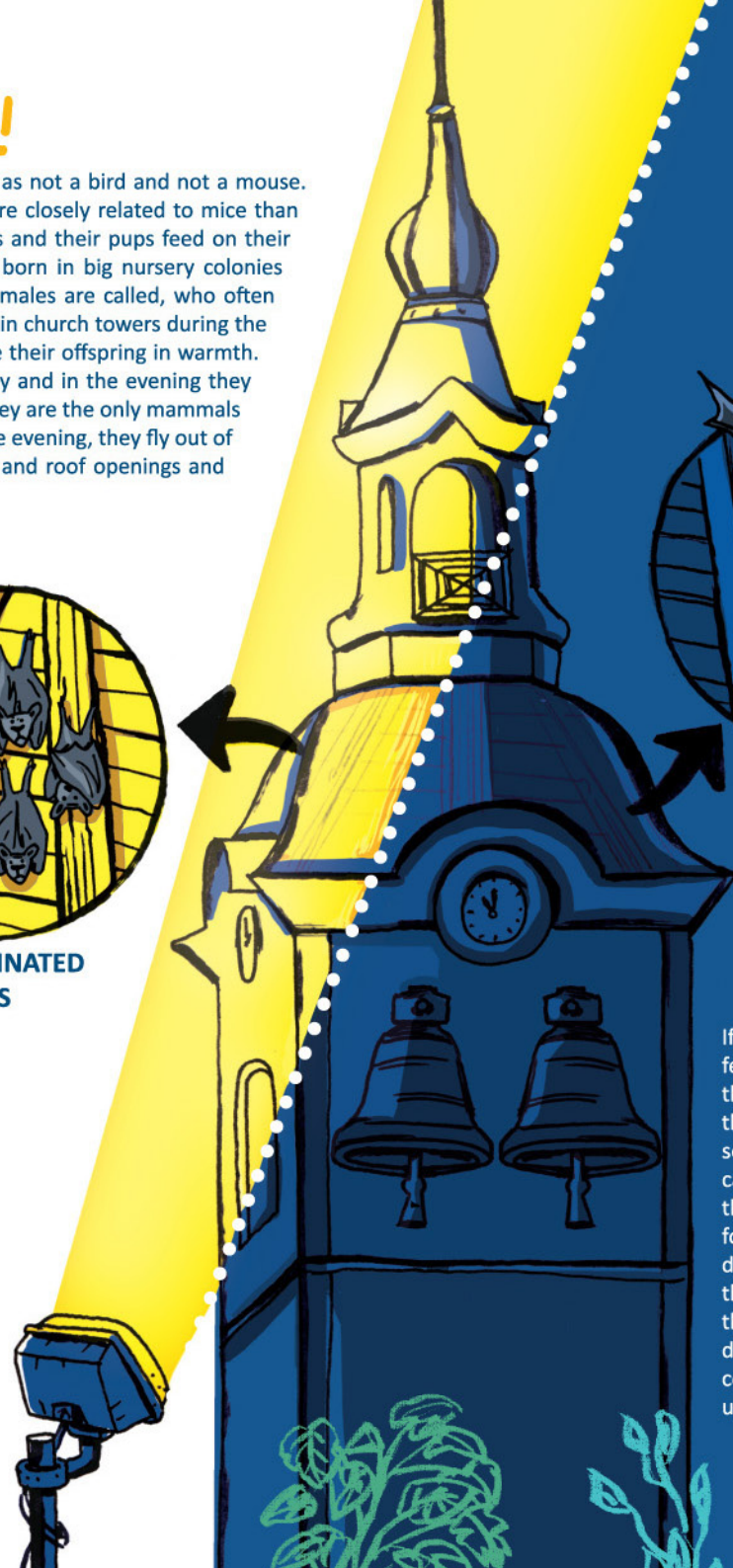
THE LIGHT IN ILLUMINATED CHURCHES DISTURBS THE BATS.



IN NON-ILLUMINATED CHURCHES, THE BATS ARE MORE SATISFIED.

WHY DO BATS NEED DARKNESS?

If the church building is illuminated, the female bats go hunting at a later time than they normally would. Because of this, they miss the evening dusk when the insects are most abundant and when they can feed the best. The rest of the night is therefore sometimes too short to make up for the lost food. Malnourished mothers do not take care of their pups as well and the pups may therefore grow slower than they usually would. So they can be underdeveloped and when their first winter comes they might find it harder to survive until the next spring.



... and a thousand of luminaires are still on outdoors?

At dusk, beings awake that are different from the ones that we are used to during the day. They are specially adapted to the night environment. Just as the day is important to us, nocturnal animals can only function in the safe shelter of the dark.

TRAPPED INSECTS

During summer nights, you must have already noticed how there is a multitude of nocturnal insects aimlessly flying around the lights. They use the moon for orientation, but due to the number of luminaires they often get confused and fly into the glow of the light, from which they can no longer escape. Illuminated and gathered in a small space, they are also easier prey for predators than they would be in a natural night environment. Many die there.



Unshielded lamp

Most of the light shines into the sky where no one needs it.

Because the insects do not feed and do not reproduce while circling around the luminaires, they have less offspring as a consequence.

Due to the reduced number of insects, there are fewer pollinators of plants and less food for animals that feed on them (i.e. bats, birds and amphibians).

WHAT CAN WE DO?



We most certainly need light. But let us not forget that even light has its dark side! We should ask ourselves how much of it do we really need for our well-being.

We can contribute to decreasing light pollution in many different ways:

Fully shielded lamp
It only shines downwards.



www.lifeatnight.si

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HOW DOES THE LIGHT AT NIGHT AFFECT



What is happening when we go to sleep at night ...



LIFE AT NIGHT

