

A moonlit night at a bucolic village not far away from Sheshan Hill in suburban Shanghai's Songjiang District

# Dark-sky zones: How tender is the night?

**Wang Yong**

Over the weekend, I shared a picture of a beautiful night on WeChat, a social media site primarily used by friends and acquaintances. A friend asked me, "Are you traveling outside Shanghai?"

I casually snapped a few pictures of the peaceful nighttime scene while strolling through a village near my home in suburban Shanghai last Saturday.

Bats were darting over a river that reflected moonbeams, while a young mother taught her child to count stars by the river. A short distance down the country road, two girls were laughing and chasing each other around their bamboo-covered farmhouses.

It was about 9pm but the lights were not yet turned on. The moon was the only source of light for the girls who were playing among a symphony of croaking frogs in surrounding ponds.

My friend, who saw my posts, is a software engineer who works and resides in Suzhou, a thriving metropolis about 20 minutes by high-speed rail from Shanghai. She frequently travels back and forth between the two cities for business tasks, but she hardly ever visited Shanghai's countryside.

"No, I'm in Shanghai," I texted her.

"What a gorgeous twilight!" she exclaimed, referring to my photo. "I didn't expect it to be in Shanghai. I thought you must have traveled to a remote valley resort."

She is not alone in assuming that Shanghai's nights are usually well-illuminated. Many tourists who have visited the Bund would think likewise. Search the Internet with such keywords as "Shanghai, a city that never sleeps," and you will "harvest" myriad articles, including travelogues, that praise the city's "ever-bright" sky. A recent story from a major media outlet regarded the well-lit nights of Shanghai

as a symbol of economic strength.

Night illuminations have their merits. They make driving at night safer, for example. They can also lubricate many economic activities in the late hours or color a city's nightlife with a festive mood. But every coin has two sides. Too much light at night can be a source of pollution, which harms not only people's health but also the organisms of certain nocturnal animals and plants.

According to a recent article published on the website of the US-based International Dark-Sky Association, strong artificial lights can disrupt the nocturnal activity of amphibians like frogs and toads, especially their nighttime croaking, which is part of their breeding ritual.

Furthermore, sea turtles hatch at night on the beach. Their hatchlings usually find the sea by observing the bright horizon over the ocean, but artificial lights tend to draw them away from the ocean. According to IDA, in Florida alone, millions of hatchlings die this way every year.

As for human health, IDA cites the American Medical Association Council on Science and Public Health as saying that "glare from nighttime lighting" can cause discomfort or even disability. Indeed, sleep disorders and traffic accidents are just two examples.

In a recent report on light pollution in Shanghai, Xinhua news agency quoted an expert as saying that the city's sky was 170 times brighter in 2011 than in 1994. This was partly because of the bright lights from commercial signs, electronic screens and traffic surveillance cameras.

Xinhua also noted that the astronomical telescope on Sheshan Hill in suburban Shanghai was once the largest of its kind in East Asia, but in 2015, severe light pollution from the surrounding areas prevented it from being further used in scientific research.