BBC LEARNING ENGLISH

Media English 媒体英语

Study measures urban light pollution with satellite



一项研究用卫星测量城市光污染源

一项在每天凌晨 1 点 30 分进行的、持续了 10 晚的实验揭示了污染夜空的人造光的主要来源。

As well as **obscuring** our view of a naturally dark night sky with that all-too-familiar **glow**, **artificial light** can disrupt our sleep and affect our health. It also affects wildlife, disrupting the natural light-dark cycle that insects, birds and other animals are tuned into.

人造光源发出的熟悉的光亮不仅会模糊我们看夜晚漆黑天空的视线,它还会扰乱我们的睡眠,影响我们的健康。这种光亮还会影响野生动植物,扰乱昆虫、鸟类和其它动物所遵循的黑白昼夜交替的周期。

To get to the root of the problem, the city of Tucson, Arizona, **dimmed** its 14,000 **streetlights** while researchers used a **satellite** to measure the effect. Capturing an image of the city at 01:30 every morning revealed that 80% of the urban light that was wasted by being **beamed** upward into space was from non-streetlight sources, including **billboards**, signs, **floodlights**, and **facades**.

为了找到问题的根源,美国亚利桑那州图森市调暗了 1.4 万盏路灯,与此同时研究人员使用人造卫星来测量其影响。人造卫星在每天凌晨 1 点 30 分拍摄一张该城市的图像,结果发现,80%的城市光因被射向天空而被浪费掉,这些光亮来自非路灯光源,包括大型广告牌、招牌、泛光灯和建筑物立面。

The International Dark Sky Association estimates that unnecessary or inefficient artificial light wastes about three billion US Dollars every year. **Turning** it **off** could reduce our **energy consumption** while most of us are fast asleep.

国际暗天协会(The International Dark Sky Association)估计,不必要或低效的人造光源每年浪费约 30 亿美元。在我们大多数人熟睡时,关掉这类照明设备可以减少能源消耗。

1. 词汇表

obscuring	遮挡, 遮蔽
glow	光亮
artificial light	人造光源
dimmed	调暗了
streetlights	街灯,路灯
satellite	人造卫星
beamed	发光,射出
billboards	大型广告牌
floodlights	泛光灯
facades	建筑物的立面

turning off	关掉,关闭
energy consumption	能源消耗

- 2. 阅读理解:请在读完上文后,回答下列问题。(答案见下页)
- 1. True or false? Artificial light can affect both humans and wild animals.
- 2. Which city did researchers look at?
- 3. What were the main sources of urban light at night, according to the study?
- 4. What could turning off unnecessary and inefficient artificial light do?

3. 答案

1. True or false? *Artificial light can affect both humans and wild animals.*

True. Artificial light can disrupt our sleep and affect our health. It can also disrupt the light-dark cycle that some wild animals are tuned into.

2. Which city did researchers look at?

They looked at the city of Tucson in Arizona.

3. What were the main sources of urban light at night, according to the study?

They were non-streetlight sources, including billboards, signs, floodlights, and facades.

4. What could turning off unnecessary and inefficient artificial light do?

It could reduce energy consumption while most of us are fast asleep.