

 NATIONAL GEOGRAPHIC



Ladders

Catch the Light

**Bright Lights
Have a
Dark Side**



**The Light
Catchers**



**Daylight
Saving Time—
Pro or Con?**



HEALTH AND WELL-BEING

Is light pollution the price we need to pay in order to see well at night? Some people may think so. People may think only astronomers and stargazers should worry about light pollution. Light pollution impacts observatories. Even a 10 percent increase in sky glow above natural levels affects telescope use. Telescopes do not work as well with sky glow. But that is only one problem. In our modern world, light pollution affects everyone. It impacts our health and well-being.

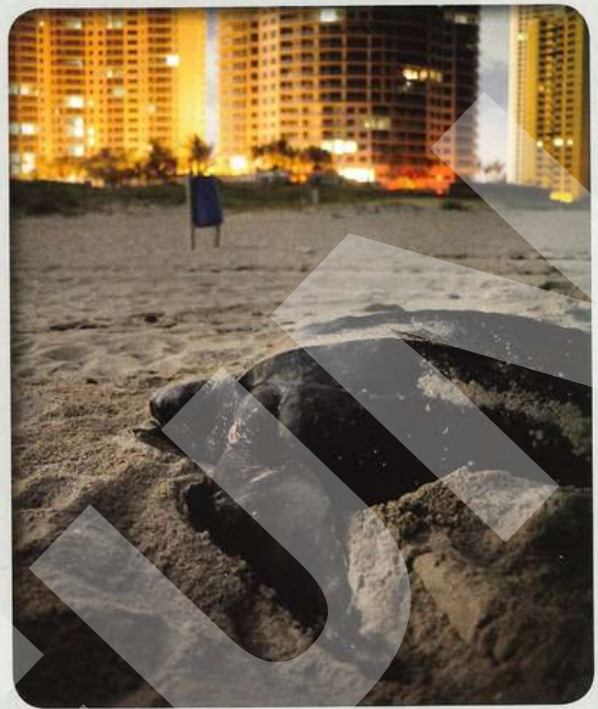
Ancient people looked to the stars to guide their travels. Since the invention of electric light, humans have turned away from the stars. Now the night sky is unfamiliar to many people.

In 1994, an earthquake knocked out power in Los Angeles. As the city grew dark, many people called 911. They reported seeing a silvery cloud in the sky. They worried what they saw was related to the earthquake. But it was the Milky Way! These people had either never seen it or couldn't name it.

The human body has always followed natural patterns of daylight and darkness. We are **diurnal** creatures. We are active during the day. After dark, we rest. We follow a predictable pattern to coordinate with periods of day and night. But periods of day and night are changing.

Artificial light allows us to ignore our body rhythms. Some animals are most active at night. But humans are not **nocturnal**. Artificial light allows people to stay active longer. Previously, people were active only during natural daylight. Depending on the season, there could be 10 to 14 hours of natural light. With electric lights, people can stay active for many more hours. Now 15.5 million people work night shifts and sleep during the day.

Americans are also finding it harder to fall asleep. Research shows that artificial light prevents the release of *melatonin*. This is the hormone that makes us feel sleepy.



Too much light at night can affect the natural rhythms and patterns of animal life.

Sea turtles have a hard time finding dark beaches that they need to lay their eggs. Baby turtles look for light coming off the water to find the sea. But beachfront lights can confuse them.



Cities glow with lights at night. Medical research shows that too much artificial light may be connected to health problems. Sleep problems, obesity, and some forms of cancer are possibly linked to excess artificial light.



The Light Catchers

by Allan Woodrow
illustrated by Tuesday Mourning

The sky was as dark as night even though it was just after lunch. Trevor and his older sister, Alice, had to spend winter vacation with Grandpa Saul in Barrow, Alaska. Trevor was nine and Alice was twelve. Trevor would have liked to go some place warmer, brighter, and closer. Barrow is the northernmost city in the United States. And this time of year, it is dark 24-hours a day.

Barrow is close to the North Pole, so in the winter, the sun sets in mid-November and doesn't rise again until the end of January. A visit to Barrow during this time was a **nocturnal** experience.

During the summer, the sun shines for almost three months in Barrow. Trevor thought daylight all day long sounded better than darkness all day long.

Now, it was icy cold, and snow fell with strong, gusty winds.

Daylight Saving Time— PRO or CON?

by Jennifer Boudart

“Spring forward, fall back.” This phrase reminds us to change our clocks twice a year for Daylight Saving Time (DST). The United States uses DST to allow for more daylight hours in summer. It is also used to save energy. Many people like DST and want to keep it. Others want to **abolish** it.



Life is better with Daylight Saving Time. DST makes us healthier. During DST, more people are active. Television watching drops. People also spend time outdoors with their families.

DST makes us safer. During DST, people can travel home in the evening before dark. Driving before dark is safer. A study published in 2007 showed that there were fewer traffic accidents during DST. There was less crime, too.



DST saves energy. Fewer lights are needed when there are more hours of daylight. Studies show that DST saves our nation enough energy each year to power about 100,000 homes.

DST helps the environment. A lot of the electricity in the United States comes from burning coal. Turning lights on later means less energy is used.

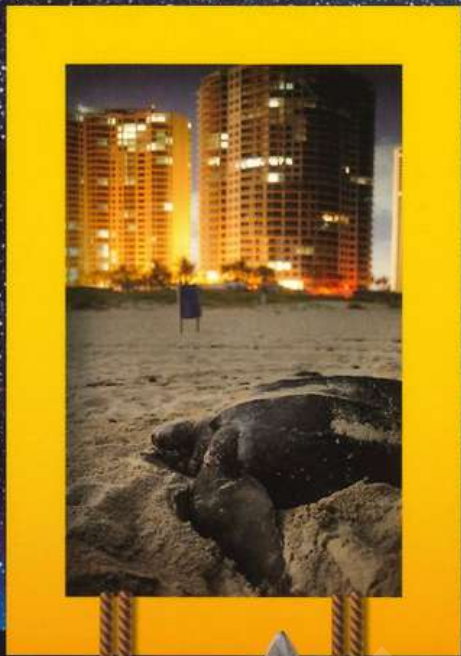
It reduces air pollution. It also means fewer hours of artificial light. This reduces light pollution. Life is better for **nocturnal** wildlife.

DST is good for the economy. Recreation areas and many stores do more business during DST.

These reasons support keeping Daylight Saving Time. It helps us in many ways.

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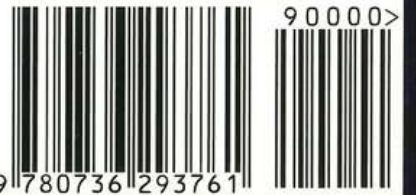
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