

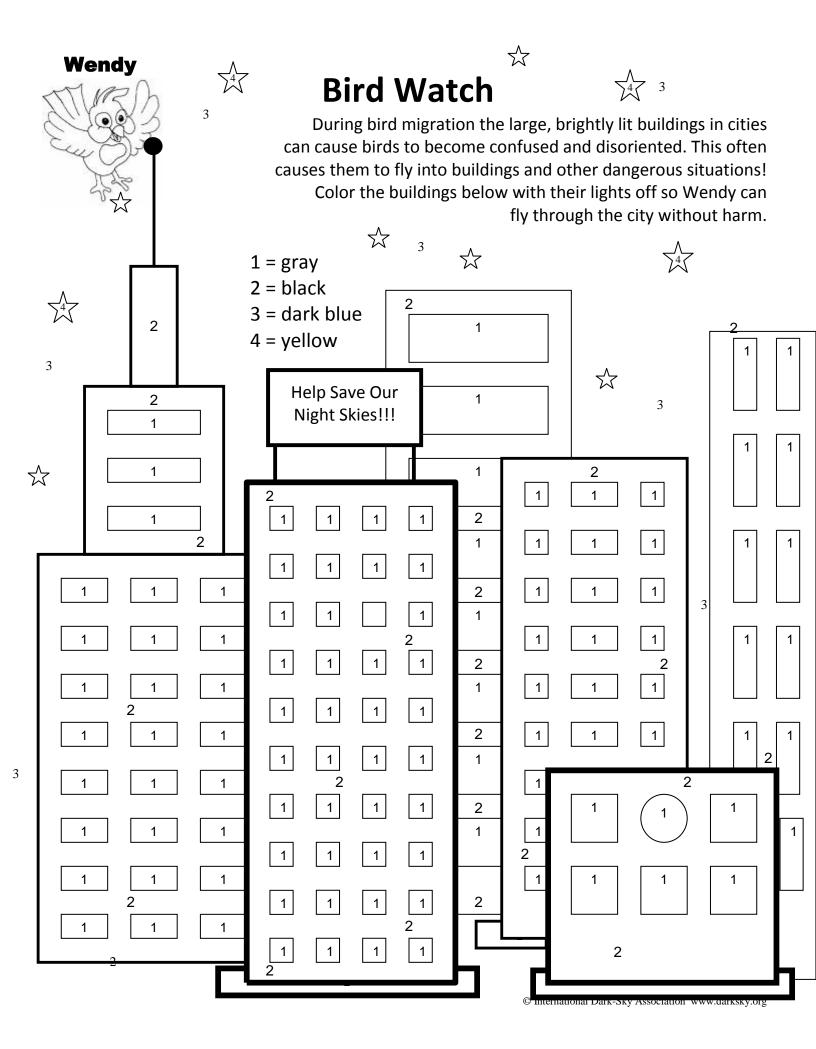
Taking a closer look at the consequences of artificial lighting and its affects on wildlife.



Images by U.S. Department of Interior, Fish & Wildlife Service

### Ages 6-12 years old

What is your favorite thing about the night sky?



# Wild about Wildlife

If you could have any animal for a pet, what would it be? Where does this animal live? How might it be affected by light pollution?

Image: State of the	List 5 other animals that are influenced by light pollution:	Why do you think it is important we help keep these animals healthy?
What can you do to help keep all animals safe and healthy?	•	
What can you do to help keep all animals safe and healthy?	2.	
animals safe and healthy?	3.	
help my friends and me?		
· · · · · · · · · · · · · · · · · · ·	help my friends	)
	· · · · · ·	

### Think Logically

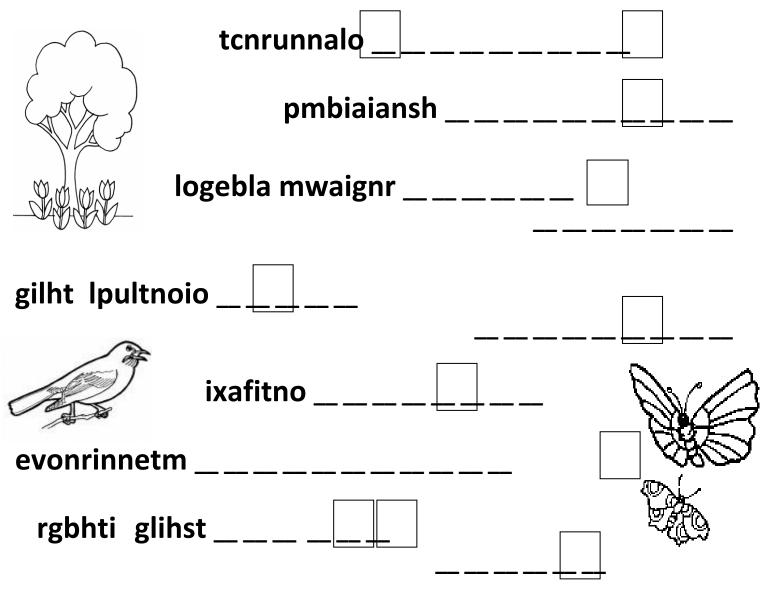
What has been shown through scientific studies is that wildlife - including insects, amphibians, birds, fish, reptiles, and mammals - need both daylight and darkness to be healthy. Light pollution causes many problems for wildlife because it creates to much artificial light during the night hours. This can result in many problems. All wildlife may experience confusion, weakened survival skills, problems reproducing and a loss of appetite or difficulty finding food. Insects and birds may also encounter fixation. Fixation is the unhealthy preoccupation that prevents the bird or insect from focusing on anything else. Have you ever seen a moth flying around a street light in circles? The moth is fixated on the light. It is important for us learn more about light pollution, and do our part to help make a healthier environment for our wildlife!

### Look at the logic chart below. Under each animal put a check mark next to the negative things they experience due to light pollution.

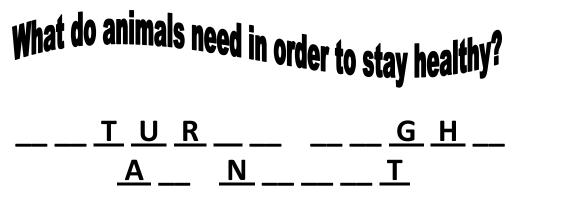
One is already done for you!	Amphibians	Reptiles	Mammals	Birds	Fish	Insects
Fixation						
Confusion or disorientation	$\checkmark$					
Loss of appetite or difficulty finding food						
Problems reproducing						
Weakened survival skills						

## **Unscramble the Scrambles**

Look at the scrambled words below. Unscramble them and write the correct word on the line.

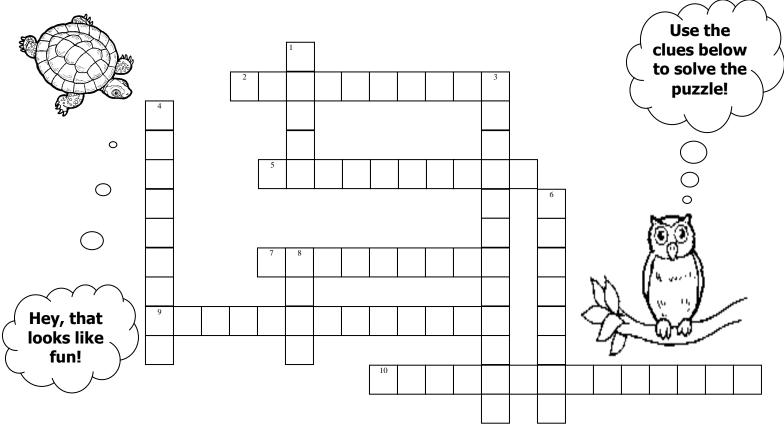


Now that you have unscrambled all the words, use the boxed letters in your answers above to answer the riddle below. Remember to place them in the same order as above.



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## **Light Pollution and Wildlife**



#### <u>Across</u>

2. Turning off your lights will help save these animals because fewer greenhouse gases will be emitted. (2 words)

5. \_\_\_\_\_ become disoriented by bright coastal lights after hatching. (2 words)

7. \_\_\_\_\_ animals sleep during the day and are awake during night hours.

9. \_\_\_\_\_ is an increase in the average overall temperature of the Earth's atmosphere. It is melting the polar ice caps and making it difficult for polar bears to hunt. (2 words)

10. Inefficient, intrusive lighting is the major cause of \_\_\_\_\_\_. (2 words)

1. A very harsh, bright light causes \_\_\_\_\_, making it difficult to see.

Down

3. Bright lights, much like \_\_\_\_\_\_ disrupt the natural instincts of moths and other insects because they become fixated. (2 words)

4. 32 million birds die every year from flying into brightly lit \_\_\_\_\_\_.

6. \_\_\_\_\_\_ is when animals are unable to focus on their survival instincts. Usually caused by a bright intrusive light.

8. \_\_\_\_\_ are examples of a nocturnal creatures.

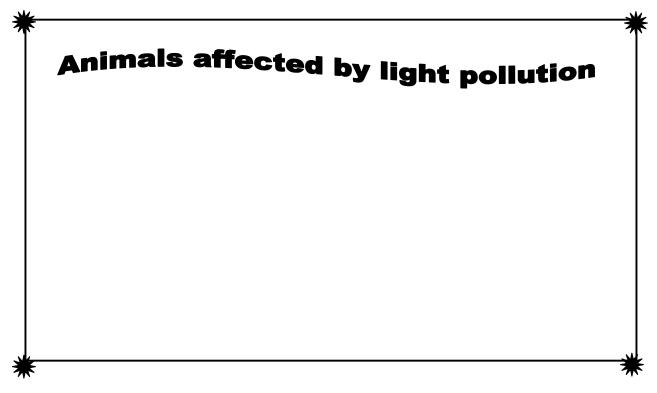
### Connect the Dets!

It might sound strange, but the energy you use to power things like lights and TVs usually comes from burning fuels such as coal and oil. This is making the Earth's climate heat up. The rise in temperature is causing the polar ice caps to melt and destroying the ice that polar bears hunt from. There are only around 22,000 polar bears left in the world, but this number could fall dramatically if the Arctic continues to warm at twice the rate as the rest of the world. The less energy you use, from turning off unnecessary lights, the less your climate will heat up and the more ice there will be for the polar bears!

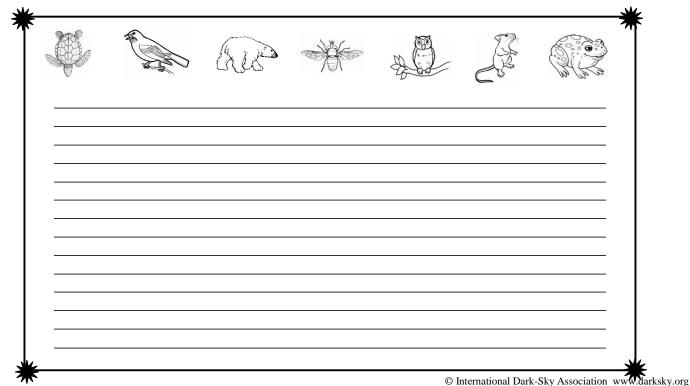


## Light at Night

Gather some magazines and brochures. Look through and pick out some pictures that show animals who are effected by light pollution.



Research the affects that light pollution has on these animals and what can we do to help? Write your answers in the box provided below.



## **Color Me Crazy!!**

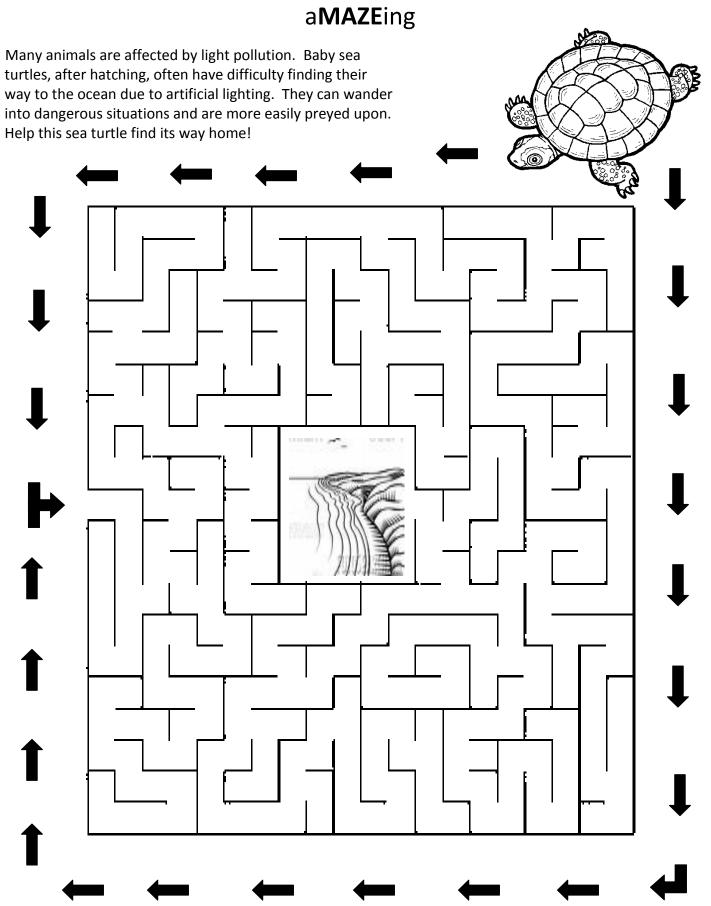
Nocturnal animals and creatures are greatly affected by light pollution. Most become disoriented and confused by the unnatural light. This causes them to wander into traffic and roadways, fly or walk into dangerous situations, or even become easy prey for other animals.



### Wildlife Word Search

Α	Μ	Р	Н	I	В	Ι	Α	Ν	R	Y	U	F	R	0	Р	S	Н	J	С
Q	S	D	А	Ζ	Н	Ν	G	Ν	Μ	L	J	Е	Е	Κ	Н	W	Т	U	0
Μ	Е	W	Т	G	R	S	А	F	Y	V	D	U	Ρ	Κ	Ν	Ι	В	Е	L
В	I	Т	Κ	W	А	Е	С	U	Н	F	I	L	Т	S	Е	L	0	Ρ	D
J	Е	В	Н	Ζ	W	С	Κ	L	Μ	S	W	Е	Ι	Ρ	Ν	D	0	R	В
V	С	Е	Ι	U	D	Т	R	Μ	А	Μ	Μ	А	L	Κ	0	L	U	D	L
Y	Н	Ν	G	0	F	R	D	U	В	Е	Ρ	А	Е	R	Т	Ι	F	V	0
А	Q	V	Е	R	Т	Е	В	R	А	Т	Е	Y	В	Н	J	F	0	В	0
D	F	Ι	S	Н	G	Y	Т	0	Ι	D	Н	J	А	L	V	Е	Х	Ι	D
W	U	R	Q	S	А	С	Ρ	Y	U	Ι	D	В	Μ	Ι	S	Е	Т	R	Е
G	0	0	D	L	Ι	G	Н	Т	J	F	R	Y	U	G	А	Q	Х	D	D
L	V	Ν	Н	U	Т	Х	V	Ν	Μ	Y	G	D	Ι	Н	W	Т	Ν	G	J
А	S	Μ	J	Е	В	Ν	U	Н	А	В	Ι	Т	А	Т	Y	Μ	R	J	К
R	Ι	Е	G	Х	В	J	Y	F	L	А	S	R	U	Ν	V	Ι	Н	Ι	L
E	Н	Ν	Ι	W	R	Н	Κ	Μ	F	D	Ζ	Q	Κ	G	L	G	Ν	Е	U
Н	Е	Т	J	W	Μ	S	R	J	G	L	F	В	U	Ε	Н	R	W	Q	U
F	L	Т	U	Т	0	R	G	А	Ν	Ι	S	Μ	Н	R	Х	А	V	Ζ	Q
К	Т	J	G	Ν	R	Ι	Y	D	J	G	Ν	V	R	Y	U	Т	0	L	С
Μ	Т	S	F	Т	U	Ν	А	W	F	Н	J	Y	U	Ν	V	Е	S	F	Т
L	I	G	Н	Т	Ρ	0	L	L	U	Т	I	0	Ν	Μ	U	Y	R	Ι	L

Amphibian Insect Mammal Reptile Cold blooded Bird Environment Vertebrate Fish Light Good light Glare Habitat Bad light Migrate Organism Light pollution Wildlife



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