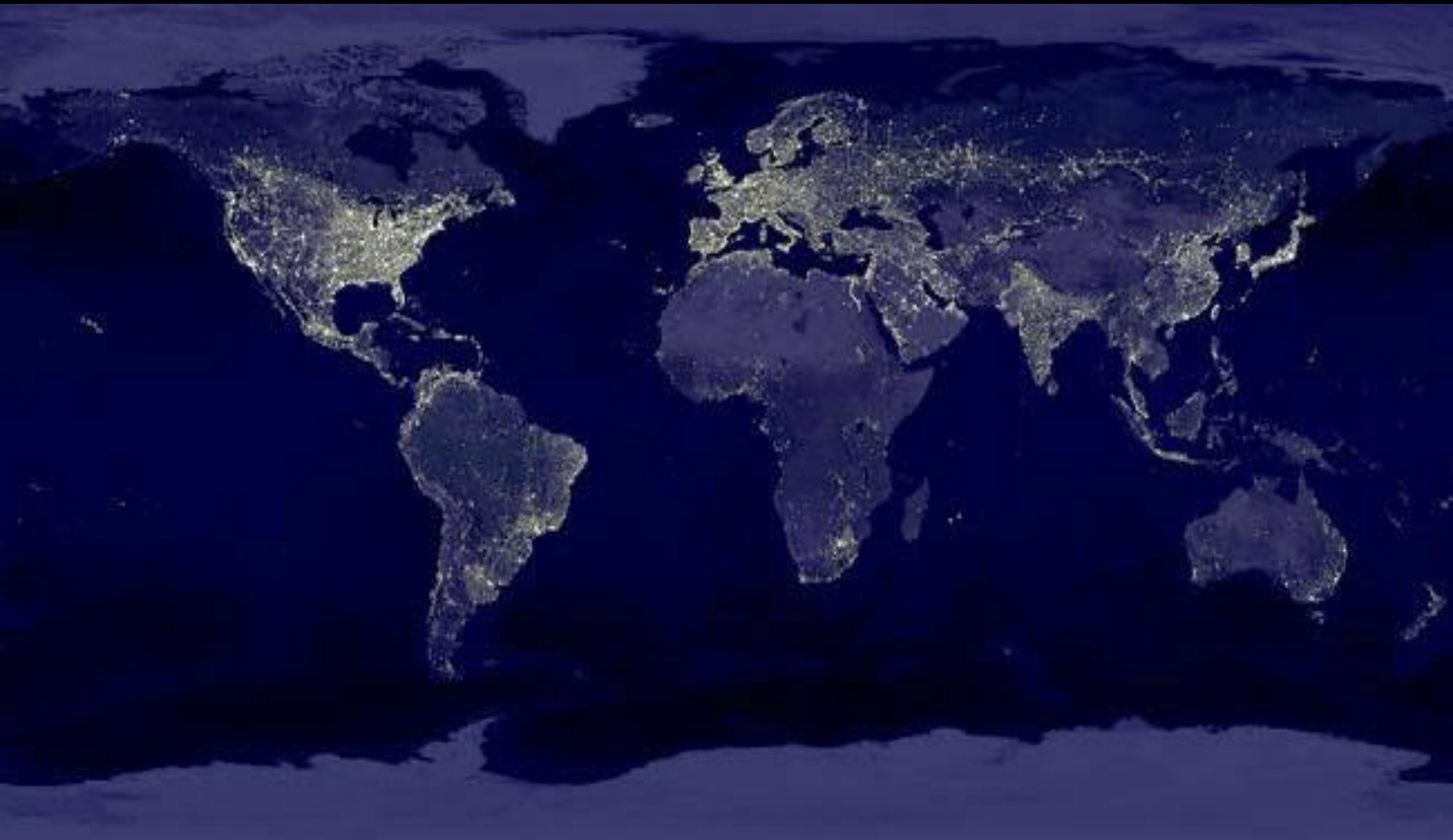


# Cottage Night Life

INTEGRA Bespoke Lighting



# Cottage Night Life

Counting the stars by candlelight  
all are dim but one is bright  
the spiral light of Venus  
rising first and shining best,  
from the northwest corner  
of a brand new crescent moon  
crickets and cicadas sing  
a rare and different tune.

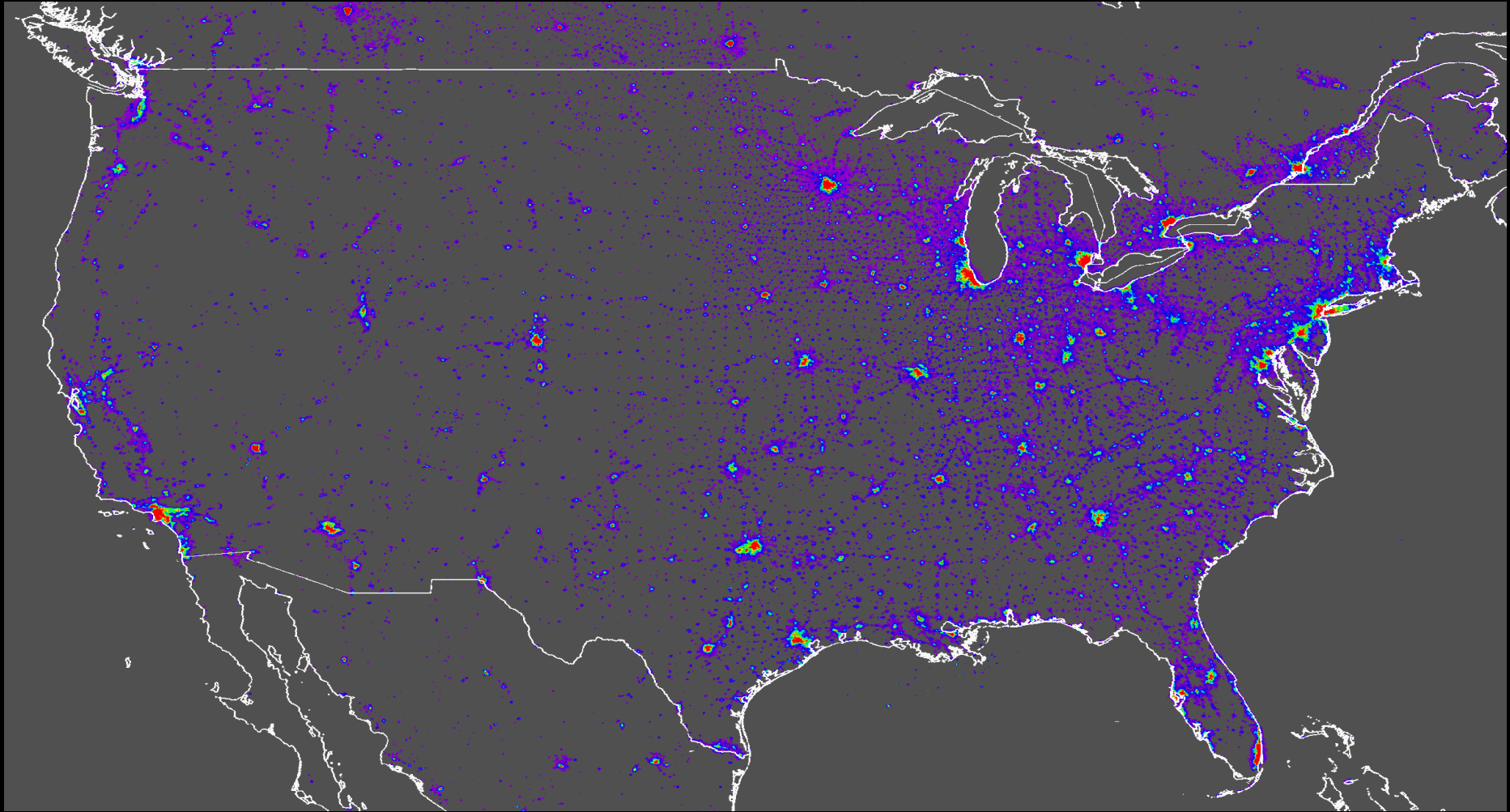
Robert Hunter



Image by:  
travis a. rector  
(national radio astronomy observatory)  
and brenda a. wolpa  
(kitt peak national observatory)



# Cottage Night Life

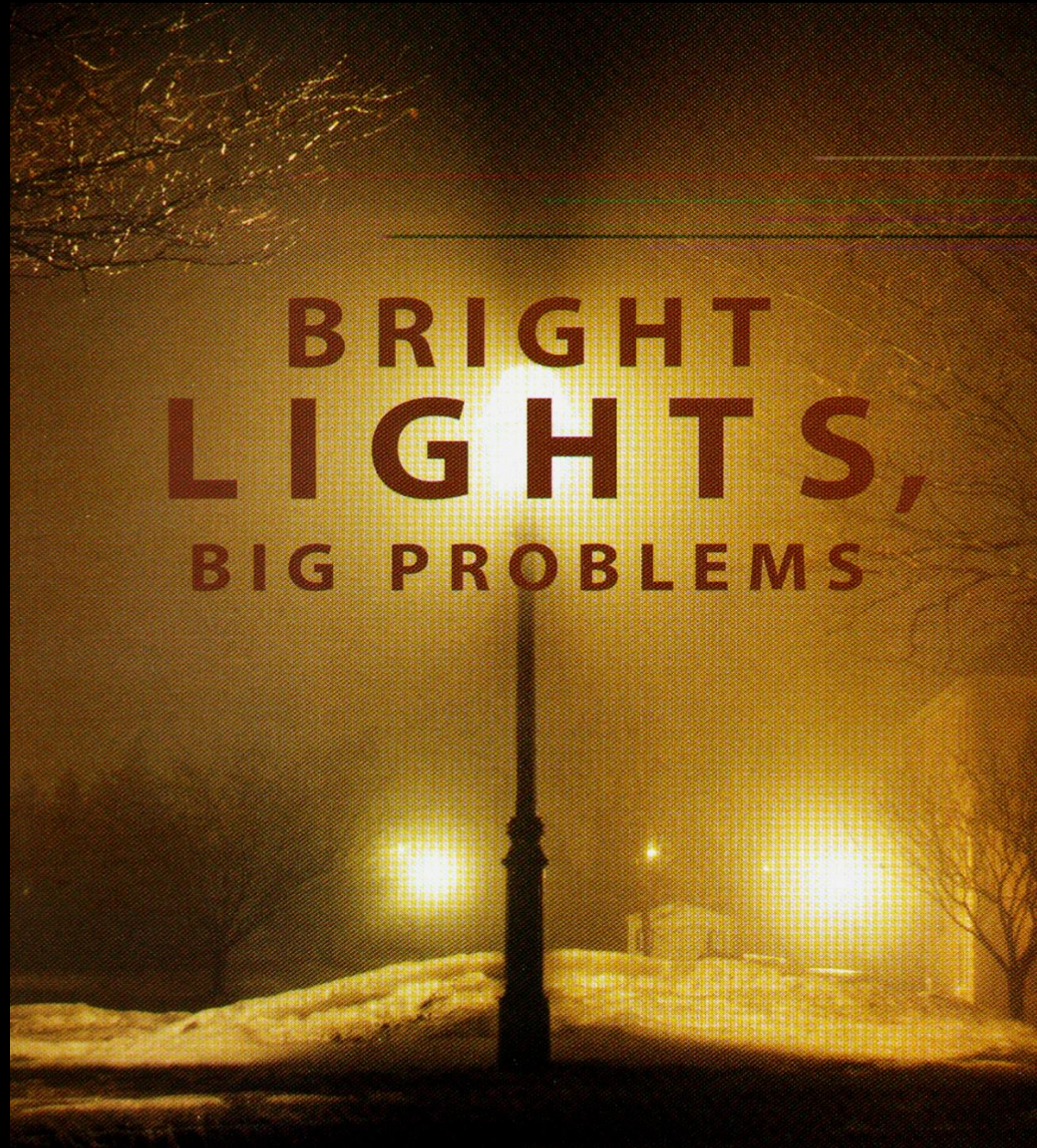


As urban sprawl has continued to grow, so has the pollution of the night sky with artificial light.



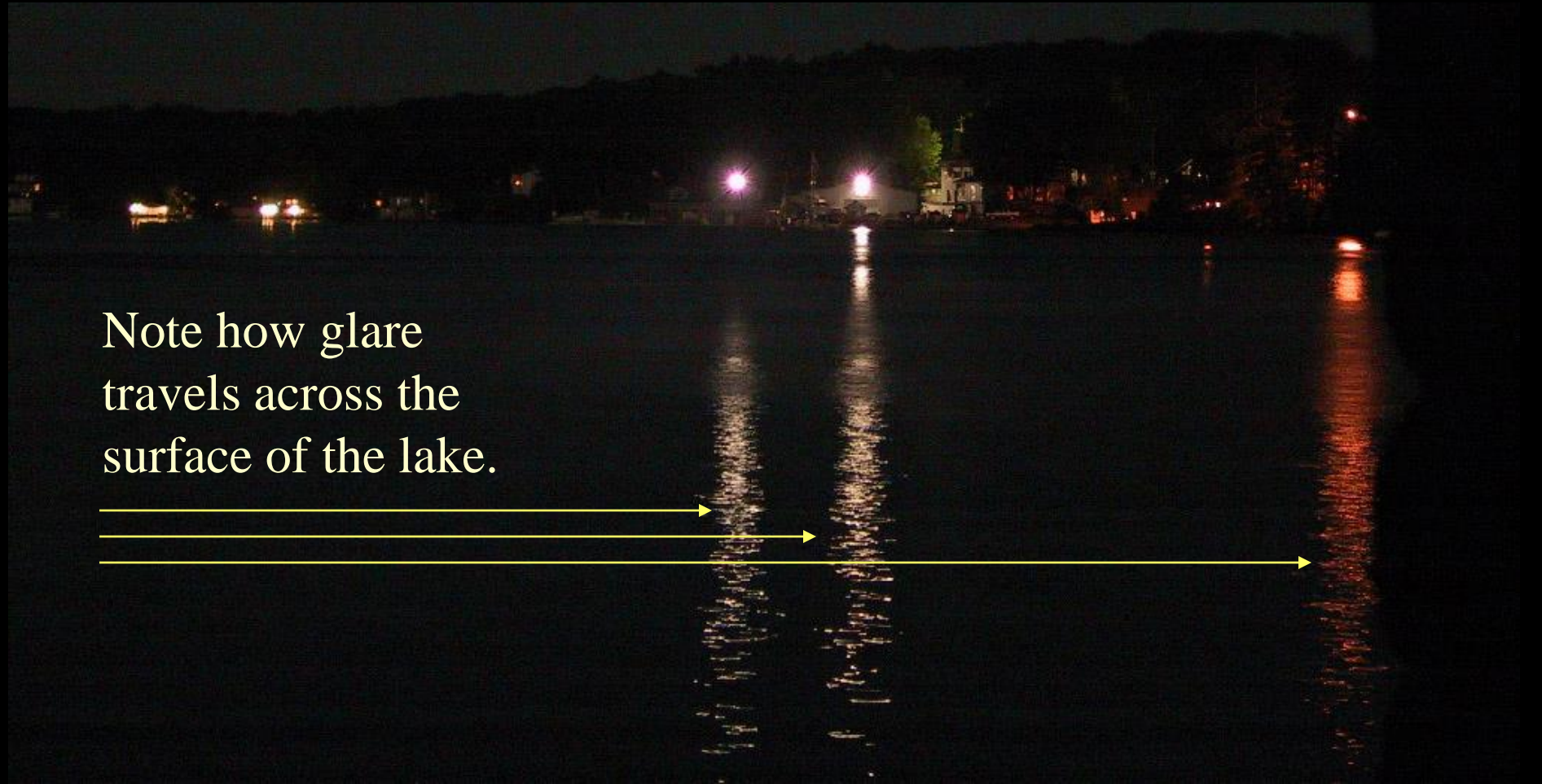
# Cottage <sup>Night</sup> Life

In the United States, it is estimated that 1.5 billion dollars per year is spent on wasted light directed into the night sky.





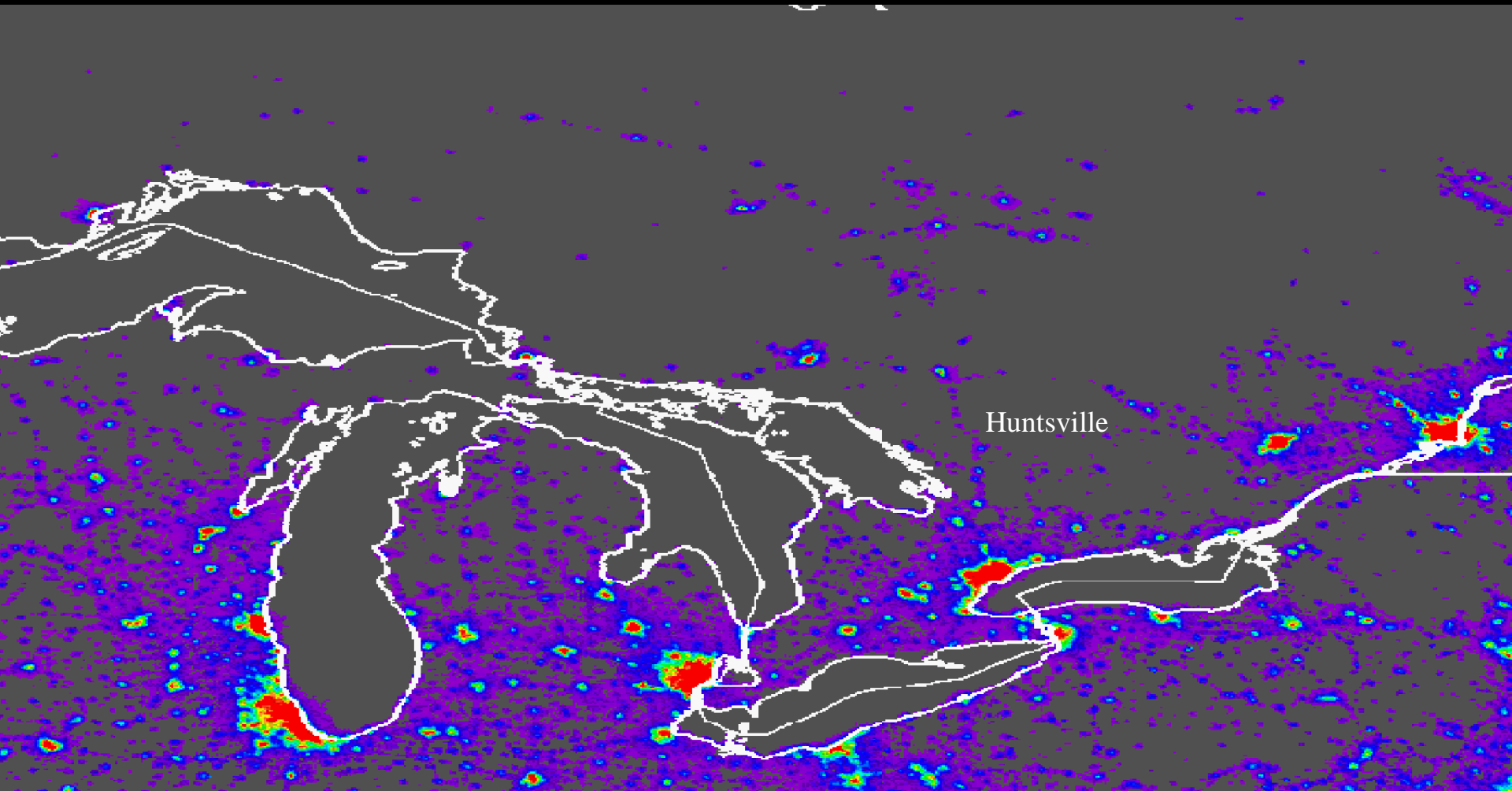
# Cottage Night Life



Note how glare  
travels across the  
surface of the lake.

Glare from unshielded fixtures along shorelines is  
particularly insidious.

# Cottage Night Life



This is a satellite image showing light pollution in most of Ontario. Note the Highway 11 Corridor.

# Cottage Night Life

*Light enters second story windows*

*Smithfalls, ONT.*



No doubt these were installed to increase  
“security”... but at what cost to our  
quality of life?



# Cottage Night Life

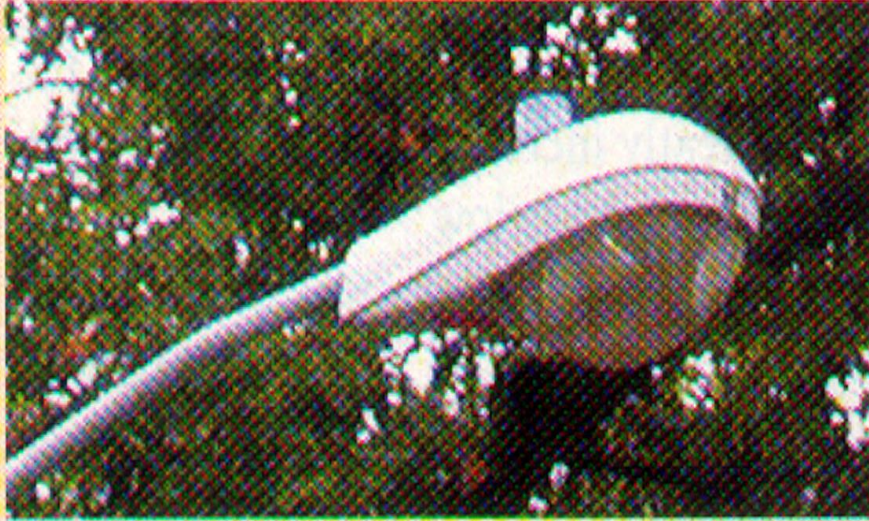
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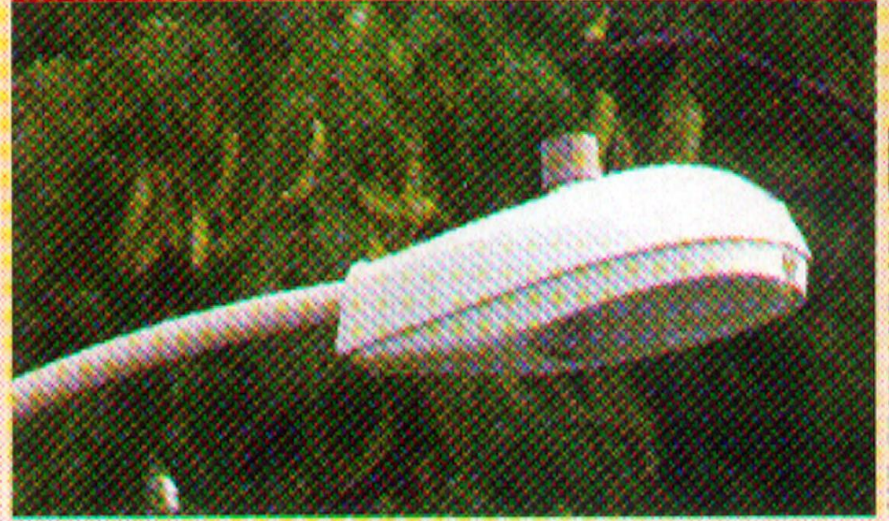
By making use of “Full Cut Off” fixtures, designers are now able to greatly reduce light pollution and increase efficiency.



# Cottage Night Life



Old Style Streetlight



New "Cutoff" Style

New fixture designs and lamp technology are now available which greatly reduce light pollution levels.



# Cottage Night Life

New municipal regulations requiring the use of “Dark Sky Friendly” lighting systems are having a big impact.

Commercial Properties have traditionally been some of the largest contributors to “Sky Glow”.

Before



After





# Cottage Night Life



© 2002 INTEG.RA Works

These are two examples of full cut off fixtures for use on residential properties.

Note that you cannot see the source of light.



# Cottage Night Life



Scientists estimate that in the United States alone 100 million birds are killed every year by crashing into windows or from exhaustion after becoming confused while trying to navigate by artificial lights instead of the stars.



# Cottage Night Life



**August 2003 Blackout.**

The image on the left is the sky over Goodwood on August 14<sup>th</sup>, the night of the blackout.

The image on the right is from the very next night. Same view, different look!

# Cottage <sup>Night</sup> Life



“It’s now possible  
to grow up never  
having been  
exposed to the  
natural beauty and  
inspiration of the  
night sky.”

Astronomy writer:  
Terence Dickinson



# Cottage Night Life

By using smaller, full cut off fixtures you are able to put just enough light precisely where it is required, eliminating light trespass and glare.



# Cottage Night Life

Before



After



Notice 2 Things... More light where it is needed

And virtually no glare is produced.

Bonus: The owner is now using less electricity!



# Cottage Night Life



Not only is this type of lighting wasteful and unattractive, it is also ineffective.

Glare hampers the ability of the eye to see.

# Cottage Night Life



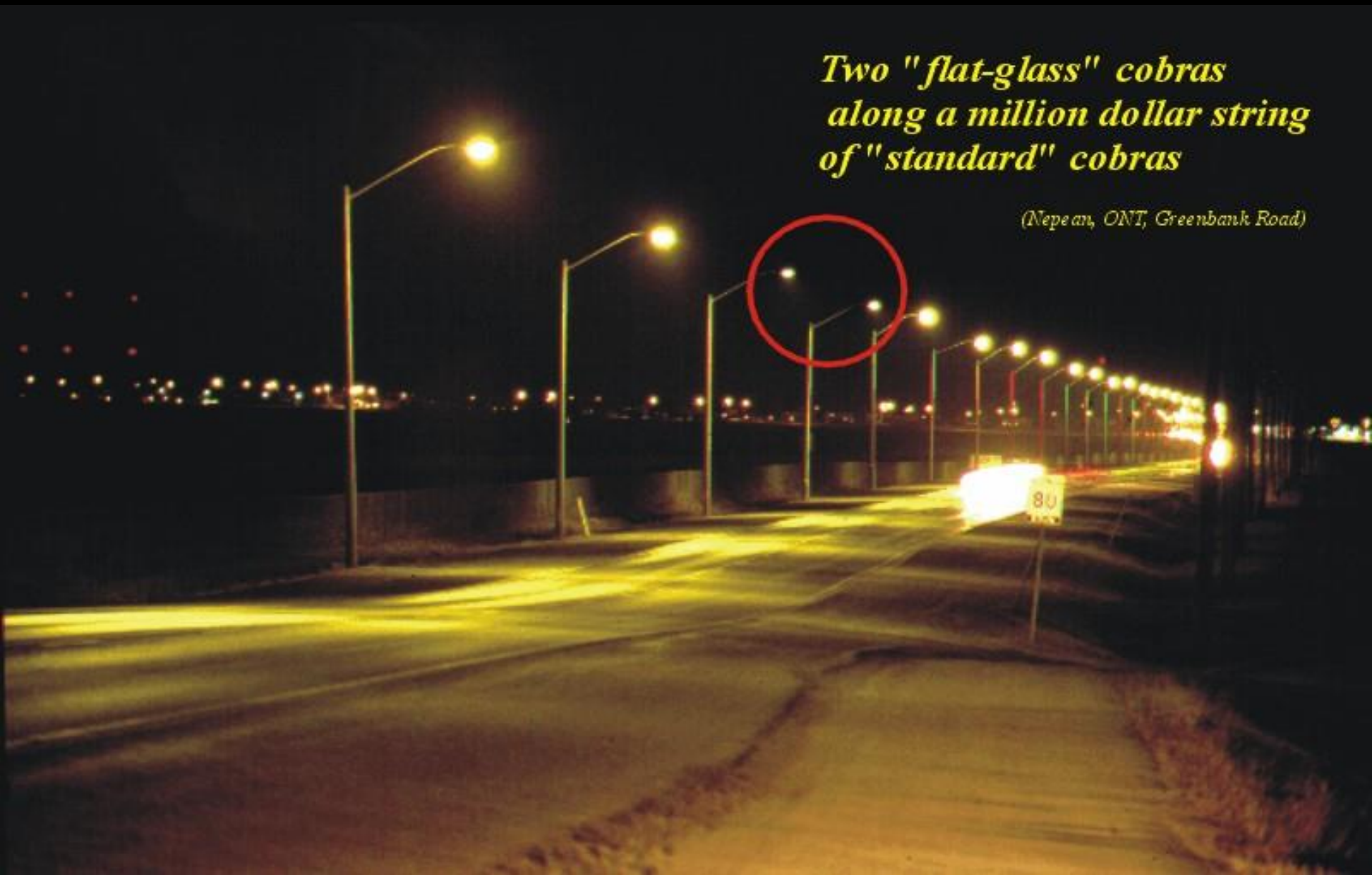
Aiming floodlights out into your yard? You might want to re-aim them down and increase the level of security around your property while making it more visually appealing to guests.



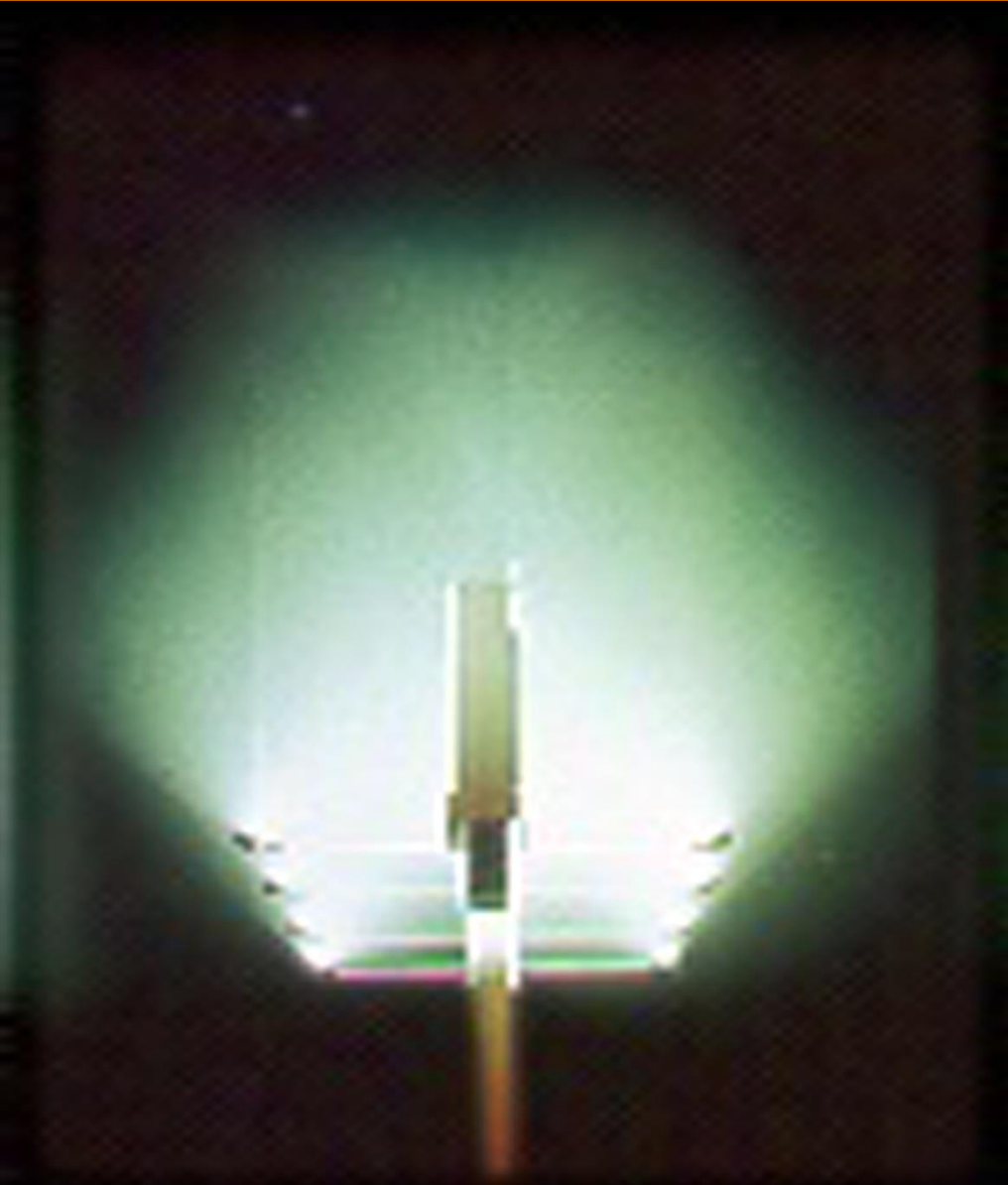
# Cottage Night Life

*Two "flat-glass" cobras  
along a million dollar string  
of "standard" cobras*

*(Nepean, ONT, Greenbank Road)*



# Cottage <sup>Night</sup> Life



Billboards should be lit internally or from the top down.

Look at the Halo of wasted light in this image.

Do you have one of these in your neighbourhood?



# Cottage <sup>Night</sup> Life

The stars  
awaken a certain  
reverence,  
because though  
always present,  
they are  
inaccessible.

Ralph Waldo Emerson



# Cottage Night Life



Prepared by: INTEGRA Bespoke Lighting Systems...  
Port Sydney, Ontario. [www.integralighting.com](http://www.integralighting.com)