

Howard

Astronomical

League





**All Astro-images by
HAL Members!**

Andromeda Galaxy

Image by
Peter Friedman



Lunar Eclipse



Image by
Gene Handler



Light Pollution

Wasteful



Harmful



Ugly



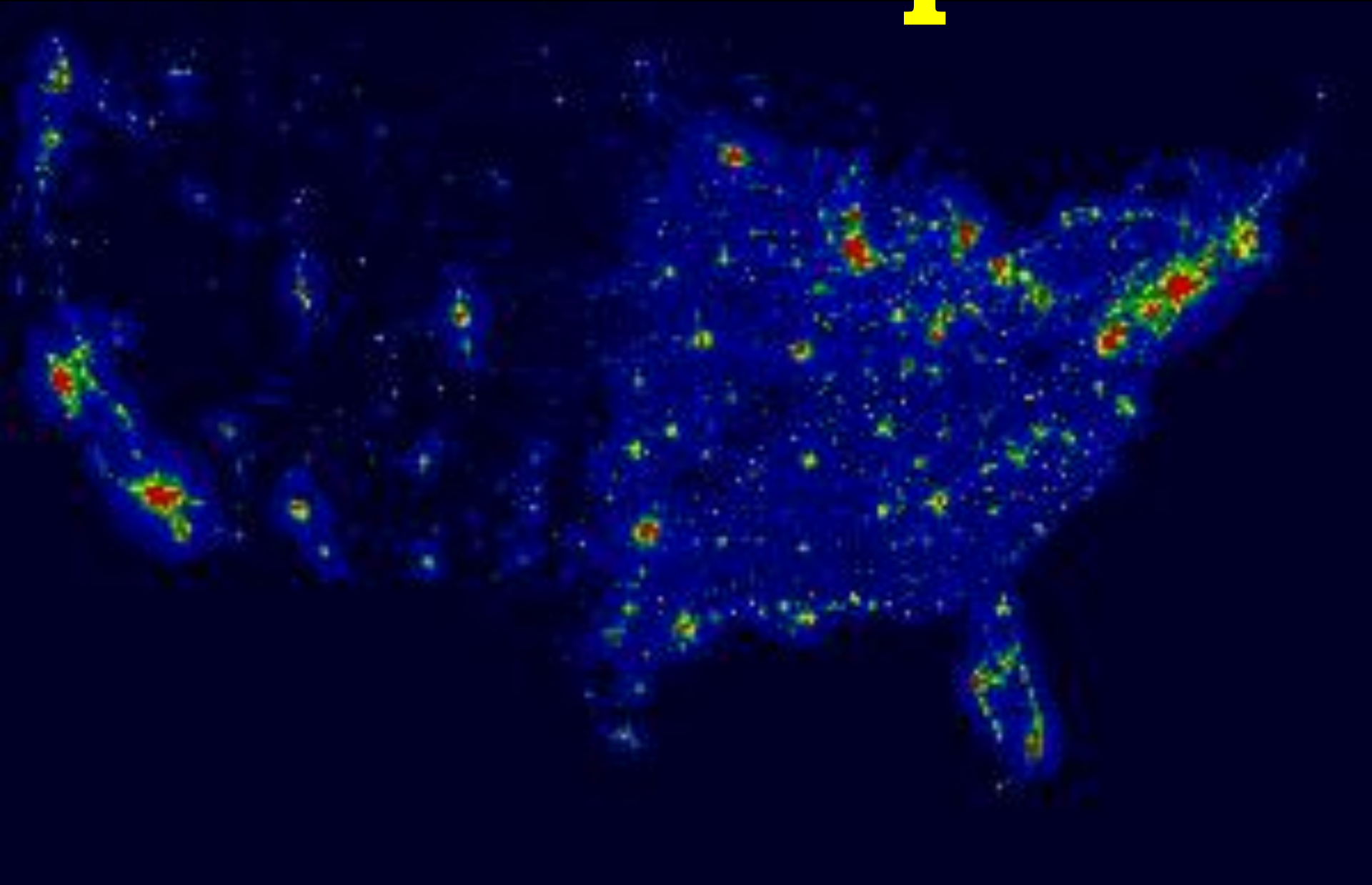
Billions in Wasted Energy



A dense field of stars, likely a star cluster or galaxy core, with a bright yellow text overlay. The stars are of various colors and sizes, creating a rich, textured background. The text is centered and reads: "All the light you see here is waste... energy spent to light up space!"

All the light you see here is
waste... energy spent to
light up space!

Can't Escape It



Lagoon Nebula

Image by
Peter Friedman



Great Nebula in Orion



Image by
Joe Bohanon

Triangulum Galaxy



Image by
Wayne Baggett



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Dark Sky

**Watch these
4 stars!**



Dark Sky

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Not-So-Dark Sky



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Not-So-Dark Sky

**This is about as good as
it gets in Howard County**



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Light Polluted Sky



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Light Polluted Sky

This is what the night sky looks like in most of Columbia



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See what you're missing?

Horsehead Nebula

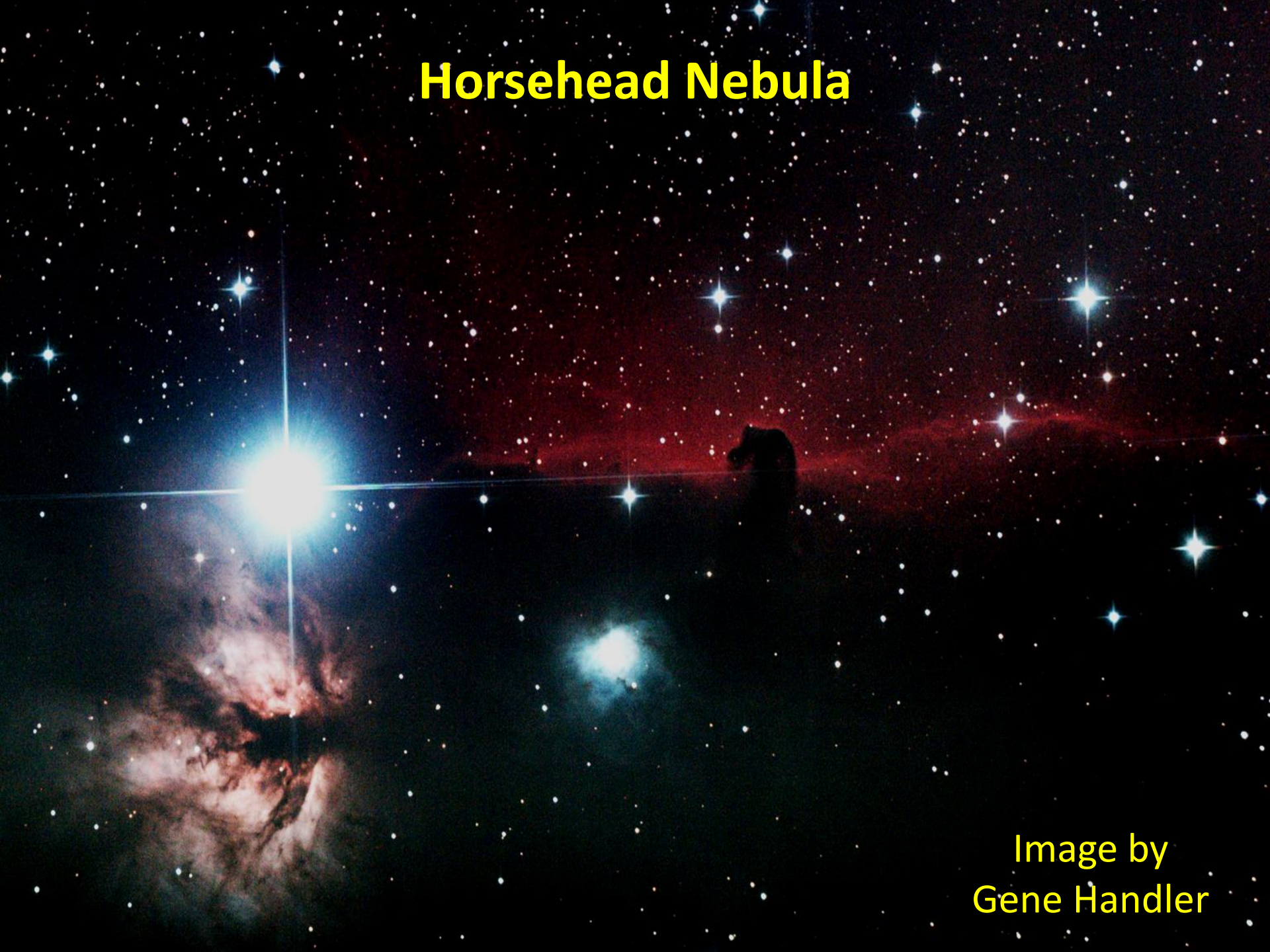


Image by
Gene Handler



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Galaxies in Leo



Image by
David Illig

Light Pollution hurts the environment!





Algal Blooms



Insects Disoriented

Food Chains Disrupted





Animal Migrations Disturbed

Clavius Crater

A high-resolution photograph of the Clavius Crater on the Moon. The crater is a large, multi-ringed basin with a dark, shadowed interior. The surrounding lunar surface is covered in numerous smaller craters of various sizes, creating a textured and cratered appearance. The lighting highlights the rugged terrain and the distinct features of the main crater.

Image by
Peter Nerbun

Omega Nebula



Image by
Peter Friedman

Mars

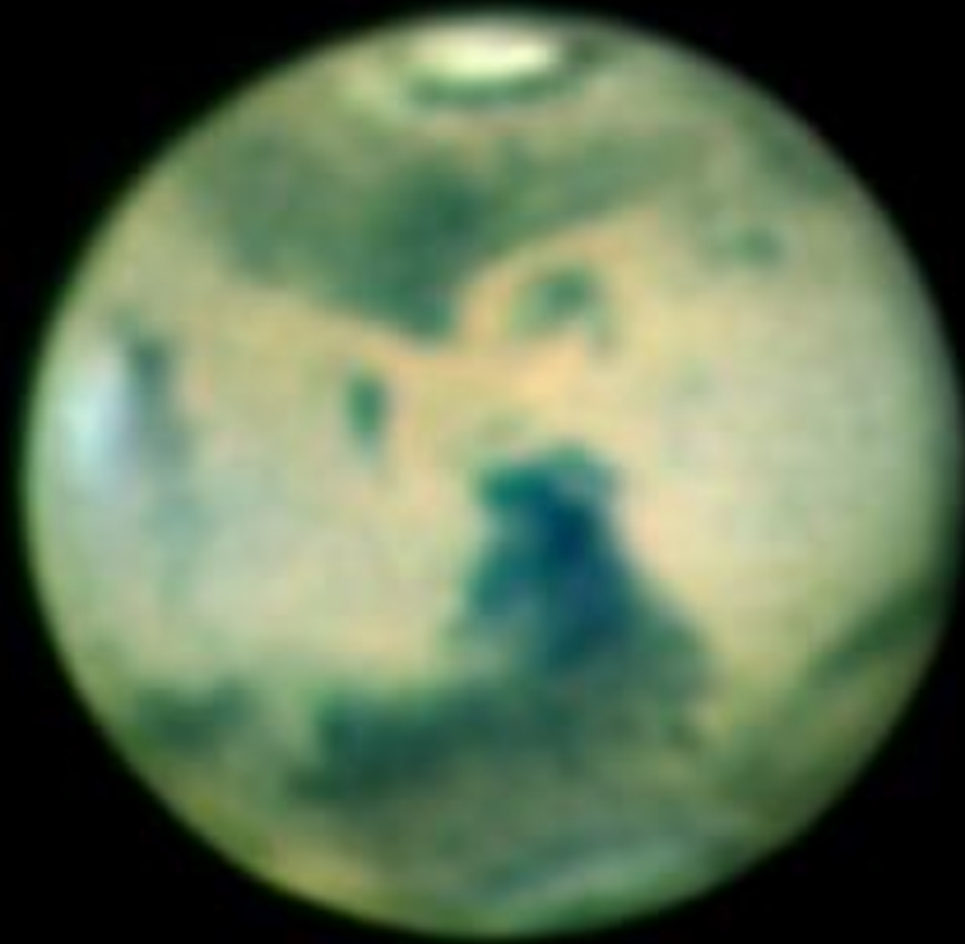
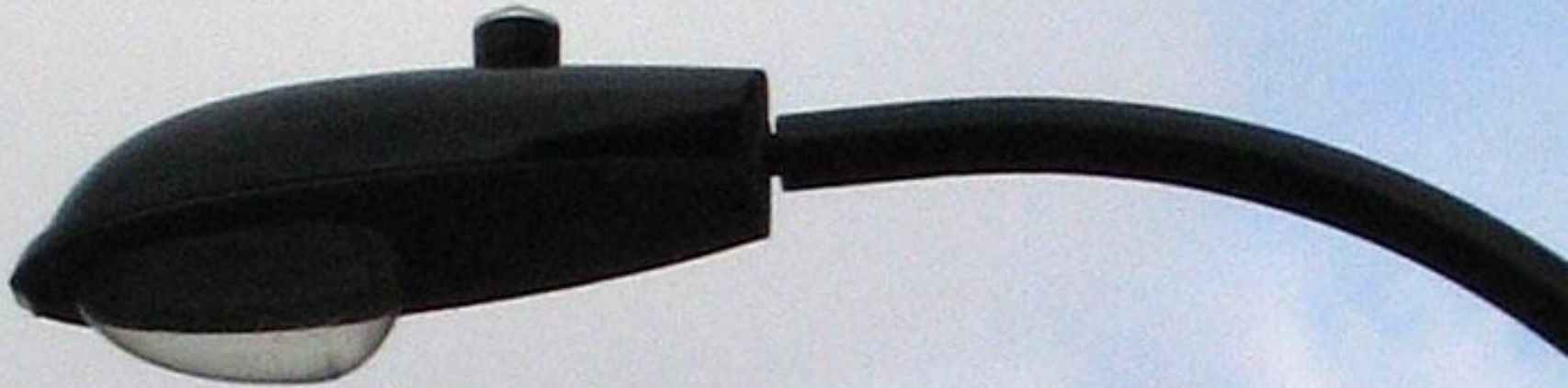


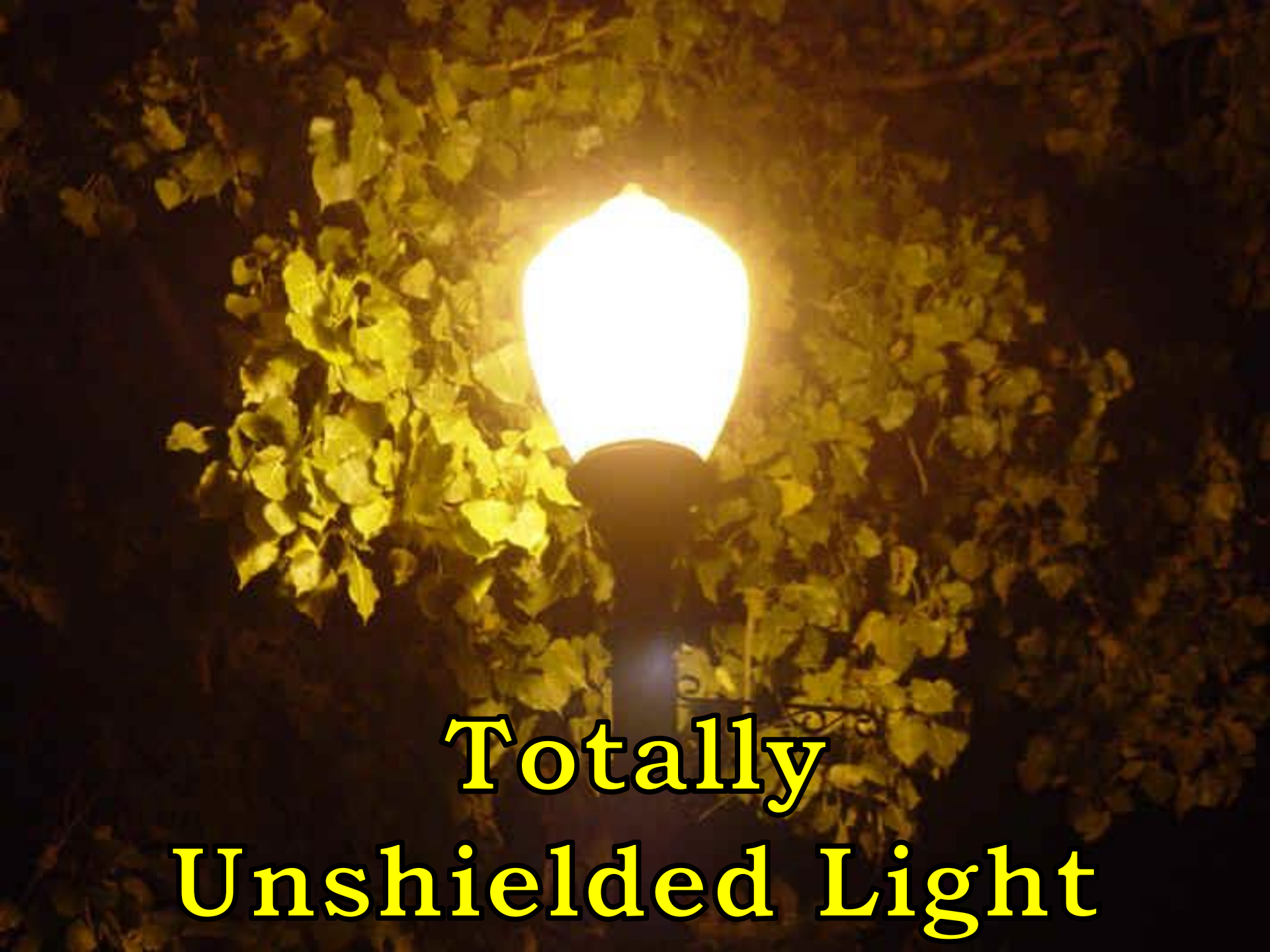
Image by
James Willingham



The Cause

Insufficiently Shielded Light





**Totally
Unshielded Light**

Light going where it's not needed



Light shining in your eyes





**Light going in
Unintended Directions**

Over-illumination





Light Shining Upward



Light Trespass

Do the neighbors ever sleep?



Dangerous and Distracting





Where's the Stop Sign?

Why?





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Jupiter



Image by
James Willingham

Saturn

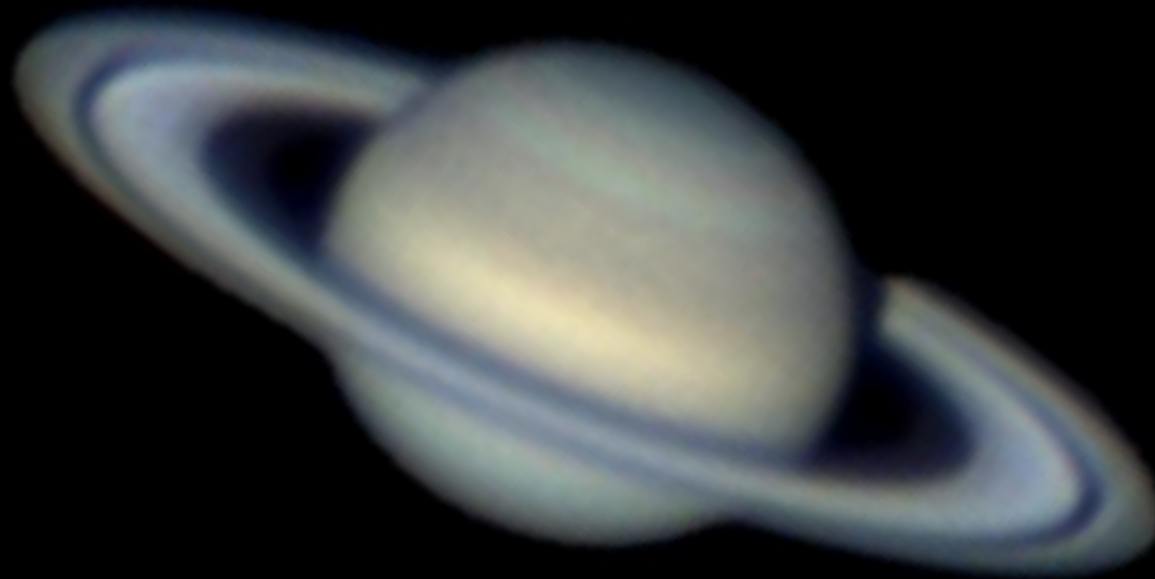


Image by
James Willingham



There Are Solutions!

Light where you want it to go



Light shining downward





**Replace streetlights
with Imbedded Lighting**



Light doing what you want it to do

“Normal”



Blackout



Ring Nebula

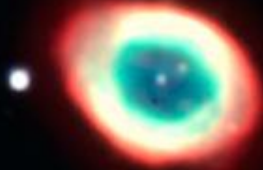
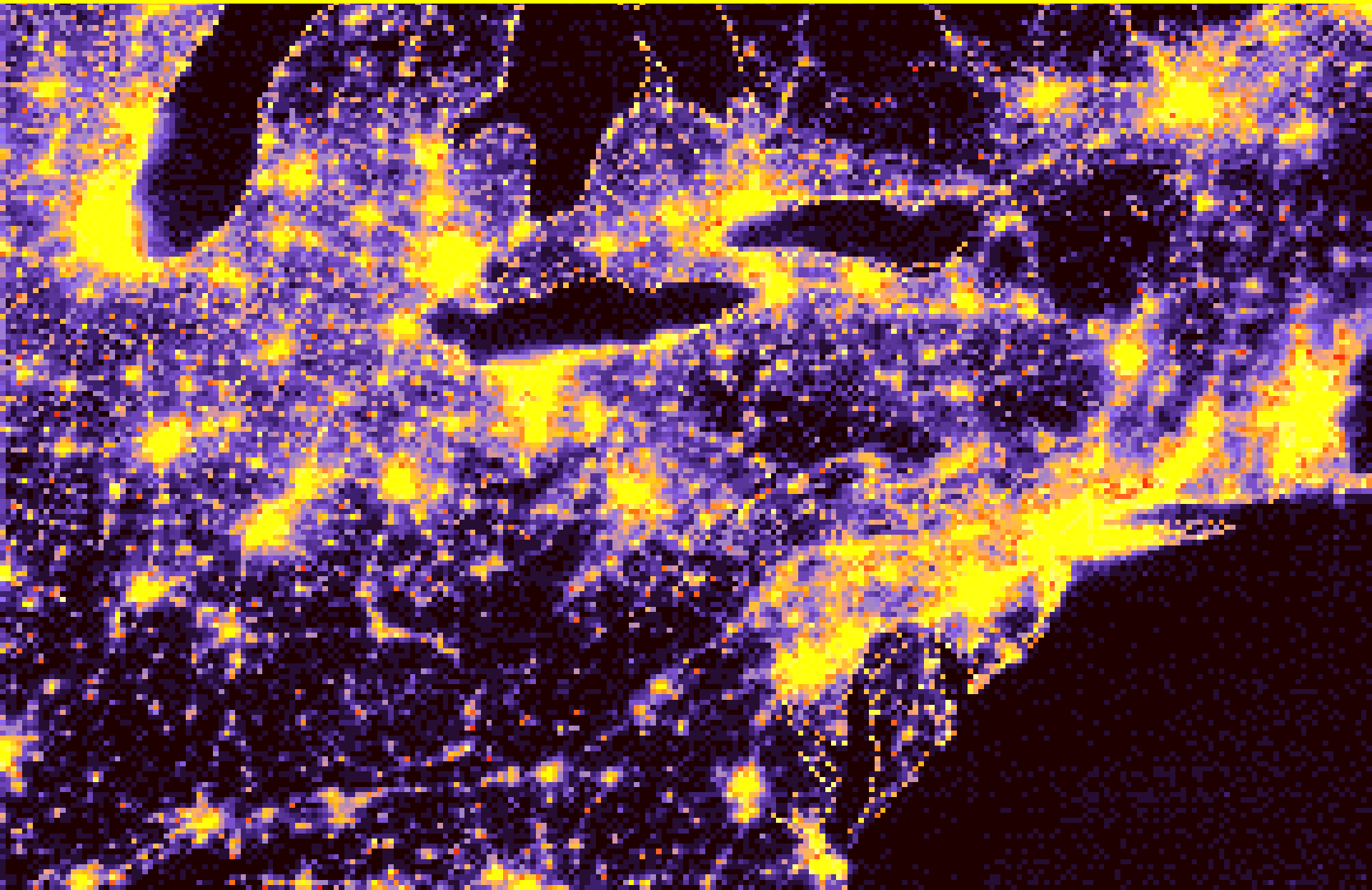


Image by
David Illig

It doesn't have to be this way!



Copernicus Crater



Image by
Eddie Crawford

Full Moon



Image by
James Willingham