

# GUEST SPOTLIGHT



## LIGHT, PLANNING, AND BIOPHILIA

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*“To explore and affiliate with life is a deep and complicated process in mental development. To an extent still undervalued in philosophy and religion, our existence depends on this propensity, our spirit is woven from it hope rises on its currents.”*

*- Edward O. Wilson, Biophilia*

### Ecosystem Engineers

Humans have always altered the natural world to better meet our needs and wants. Indeed, many other species alter the physical environment to create better conditions. These animals are called ecosystem engineers. Some of these species are quite good at it. Red groupers remove sand from hidden seabed holes for permanent shelter. Leaf-cutter ants build mounds that ventilate with a slight breeze. Sociable weavers build nests that can house nearly 400 individuals and last over 100 years.

While studying urban ecology at the University of Utah, these and many other examples of how species interact and manipulate the physical world led me to analyze and improve how humans engineer our settlements. We dam rivers like beavers and spin silk like spiders. However, we might have the upper hand when it comes to engineering light.

### Dark Skies and Planning

Urban ecology is the study of human settlements from an environmental, social, and economic viewpoint. Its purpose is to enhance human settlements in order to improve all aspects of life. By analyzing how systems are interconnected, rather than independent, we can build cities that are resilient to changing social dynamics, market fluxes, and climate change.

The work of dark skies is an environmental, social, and economic issue. Poor lighting design at night has an array of negative consequences that most people are unaware of. At the city level, leadership has the opportunity to decide whether street lights will waste money, cause insomnia, and wreak havoc on our sister species. On the other hand, those same individuals can make decisions that enhance security/visibility, be financially responsible, and environmentally conscious by choosing dark-sky friendly lighting. Likewise, developers, homeowners, and



business people are presented with similar decisions on how they light their properties, and therefore, how people in those spaces interact with and are affected by light. Indeed, everyone has a hand in dark sky preservation. From large metropolitans to small rural farm towns, our society must come to understand the power of artificial light at night and learn how to design lighting more responsibly.

Thankfully, dark sky conservation is a topic where people can unite regardless of their educational background, political beliefs, or occupation. Every community across the globe can participate in the work of dark sky conservation in ways that are best for them. Through this work, people are re-connected to the night sky and, regardless of the motive, become aware of their impacts on the natural world.

## **Biophilia**

When people connect to the natural world and its systems which provide water, air, and energy, they start developing a sense of biophilia or love of place. This is critically important because people will save and cherish what they love. As cities and nations face with ecological disasters, financial strains, and social divides, we must love the places we live and the natural systems that support human life in order to overcome these and other challenges that face our settlements.

While artificial light at night is just a sliver of what we must face in this rapidly changing world, dark sky conservation could be the tool, method, and route that fosters biophilia and enables everyone to become caretakers of this world.