



## 2015 AGM Covers A Lot of Ground

This past November, IDA convened a conclave of expert scientists, policy makers, industry representatives, concerned citizens and grassroots leaders to learn about the ecological impacts of artificial light at night and what can be done to reduce its devastating effects on fish and wildlife resources.

For billions of years, all life on Earth has relied on the planet's predictable rhythms of day and night – so much so that it is encoded in the DNA of all plants and animals. However, by lighting up the night, humans have radically disrupted this cycle with enormous impacts to the environment and fish and wildlife.



Mammals, birds, fish, amphibians, reptiles and invertebrates all depend on Earth's daily light and dark cycles to govern life-sustaining behaviors such as reproduction, nourishment, sleep and protection from predators. A rapidly growing body of scientific evidence suggests that artificial light at night not only has negative and deadly effects for humans, but also for numerous species.

According to conference speaker Dr. Travis Longcore, "In just over a century

since the invention of the electric light bulb, broad swaths of the planet have been transformed from experiencing a natural pattern of light and dark determined by the sun, moon, stars and occasional other transient lights. The results of recent research have extended knowledge about the geographic scope and specific impacts of artificial night lighting on animal behavior, physiological processes, and ecological interactions across a range of taxa, and its broader ecosystem effects."

For two days, more than 100 participants heard from panelists from around the world as they presented state-of-the-art research documenting how light pollution disrupts the behavior and habitats of mammals, birds, fish, amphibians, reptiles, and invertebrates. The conference closed with experts from the professional lighting community discussing ways in which artificial light at night can be managed and its ecological impacts mitigated. See the full conference program at [darksky.org/2016AGM](http://darksky.org/2016AGM).



## IDA Steps Up its Public Policy Advocacy

Reaching decision makers is vital to our efforts to protect night skies and the nighttime environment.

During 2015, with the help of our members and supporters, we ramped up our efforts and became more involved than ever in influencing decision makers about the importance of night sky protection. Here are a few highlights.

In cooperation with the Arizona-based Center for Biological Diversity, we submitted a letter in July to the office of U.S. Representative Raúl Grijalva concerning the Greater Grand Canyon Heritage National Monument Act (H.R. 3882). The bill, introduced in Congress in October, would grant protected status to nearly 2 million acres north of Grand Canyon National Park. At IDA's suggestion, the legislation requires the Departments of Agriculture and the Interior to develop a management plan for the Monument, including instructions to "evaluate the naturally dark time conditions and propose goals and management directives to retain current characteristics." It

The Sand to Snow National Monument links the San Geronio Wilderness to Joshua Tree National Park (left) and the San Bernardino National Forest. Photo by NPS/Lian Law.

is the first time dark skies have been explicitly addressed in the enabling legislation for a new U.S. National Monument.

Building on the idea of rallying support for the creation of new, protected places in the United States, in October IDA signed on to a joint letter with many southern California environmental groups and organizations asking President Barack Obama and Secretary of the Interior Sally Jewell to designate three new National Monuments in the southern California desert – Mojave Trails, Sand to Snow and Castle Mountains. We then invited our supporters to write or call the President and Secretary to express their support for the protection of these pristine areas and defend their remarkable night skies for generations to come. Thanks to everyone who voiced their support, the President invoked his executive authority and designated all three Monuments in early 2016.

Guest columns and letters to the editor of major newspapers are another means of effectively communicating IDA's message about dark skies. In June, the *Arizona Republic* published a guest editorial penned by IDA Executive Director Scott Feierabend ("Phoenix's new lights don't lead to a brighter future") in which we argued against the plans of the City of Phoenix, Arizona, to install 4000K white LED streetlights to replace its existing high-pressure sodium street lighting system and instead called for a color temperature limit

of 3000K. "Phoenix has a chance to set a good example that will influence peer municipalities throughout the U.S. and across the globe," Scott wrote. In September, the city canceled its request for proposals for the contract at a specified color temperature of 4000K, in part citing "feedback from the community regarding additional 'dark sky' considerations." The revised RFP now stipulates 3000K-4000K, so we still have a lot of work ahead to convince the city that 3000K is best.

In July we called on IDA members and supporters to speak out against "Projecting Change," an event that bathed New York City's iconic Empire State Building in 800,000 lumens of light, showing images of endangered species from around the world. One of the project's creators lamented he only had "40 giant cannons," or light projectors, and wished he "had more." Two weeks later the *New York Times* published an IDA letter ("Empire State Building Light Display's Effects on Wildlife") noting the project's tremendous amount of unnecessary light that "wreaks havoc on the urban ecology of the city, confusing migratory birds and disrupting the natural cycle of plants." It further challenged the owner of the Empire State Building for "hosting such an environmentally irresponsible event" in the face its self-proclaimed "reputation for sustainability." While we ultimately failed to stop the event from taking place, IDA successfully drew public attention to the issue of wasted light and its damaging effects on urban wildlife.