

2016 Annual Report | ISSUE #98

# NIGHTSCAPE

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## FROM THE PRESIDENT

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# PRESIDENT'S STATEMENT

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Diana Umpierre

IDA saw several firsts in 2016, such as the first Dark Sky Places in Australia, Florida, and Georgia. One of the Seven Natural Wonders of the World, the Grand Canyon was certified as a Dark Sky Park. We witnessed an inspiring outpouring of grassroots engagement from IDA Chapters in Chicago, Phoenix, and Mexico, among others. Light pollution and dark sky awareness reached new heights. In California, a group of citizens successfully sued their city for lack of environmental review before undergoing an LED retrofit. 2016 IDA award recipient, STAR Communities, now provides extra points to communities that earn IDA Dark Sky Community status as part of its comprehensive sustainability rating program.

It was also a year of challenges as we struggled to remain abreast of the fast pace of irresponsible, blue-rich LED retrofits. The American Medical Association report, "Human and Environmental Effects of Light Emitting Diode Community Lighting," affirmed a growing body of scientific evidence implicating LEDs in human health problems, and the "New World Atlas of Artificial Sky Brightness" are welcome resources in our outreach efforts.

Looking ahead in 2017, IDA will expand its efforts at becoming a more diverse and inclusive organization. My election as President might be an indication that we are indeed becoming more diverse. (I'm the first female and first Hispanic privileged to serve in this IDA position.) We will continue to challenge ourselves to do far more. As an international organization, it is also our duty to extend our mission to protect the night in all corners of the world. I would like to see us expand our outreach in Latin America and Africa, and I look forward to hearing your ideas on how we can accomplish this. On the technical side, we plan to release best practices for outdoor sports lighting, launch new categories of Dark Sky Places and revise the Model Lighting Ordinance (MLO).

In 2017, IDA Executive Director, Scott Feierabend, and I will also be reaching out to identify people that would like to serve IDA in a new capacity. As we look to expand our programs, diversify our support base, empower our grassroots and improve our financial sustainability, we will need talented and passionate volunteers to help us meet these objectives and to bring new perspectives and expertise.

I am proud of the accomplishments we witnessed in 2016, and I look forward to your continued guidance and involvement as we strive to advance our noble mission by leaps and bounds in 2017. Thank you for your unwavering support which is so vital to our collective success.



## THANK YOU

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# THANK YOU!

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IDA is on a mission to protect night skies for present and future generations. Thank you for your continued financial support, which is vital to the success of our programs and our mission! It is with thanks to generous support from our members and donors that we have:

Certified **10,740** square km of Dark Sky Places

Supported **60** IDA Chapters in 13 countries

Approved more than **1,000** Dark Sky Approved lighting products

## OUR IMPACT

## VISUALIZING OUR IMPACT

IDA works to preserve and protect the nighttime environment and our heritage of dark skies through environmentally responsible outdoor lighting.



### DARK SKY PLACES

72 Dark Sky Places in 13 countries, totaling 10,740 square km of certified dark skies

### IDA CHAPTERS

60 IDA Chapters on the ground, representing IDA in five continents.

## IMPACT AT A GLANCE

Dark Sky Places conserve dark sites through responsible lighting policies and public education

- 16 New Dark Sky Places were approved in 2016
- 10,740 square km (40,147 square miles)

## DARK SKY PLACES 2016

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IDA certified 16 Dark Sky Places in 2016:

### **Cosmic Campground (New Mexico, U.S.)** International Dark Sky Sanctuary

This site in the Gila National Forest of western New Mexico is the first International Dark Sky Sanctuary designated in the United States. It is also the first protected area in the International Dark Sky Places program managed by the United States Forest Service, an agency of the federal Department of Agriculture. Its pristine night skies are already drawing interest and astrotourists from around the world.

### **South Downs National Park (Hampshire and Sussex, England)** International Dark Sky Reserve

This Dark Sky Reserve lies within about 100 km of the edge of the greater London metropolitan area, among the most light-polluted major cities on Earth, making its dark skies readily available to more than ten million people who live within a two-hour train journey of the Downs.

### **Mayo Dark Sky Park (Ireland)** International Dark Sky Park

IDA named the first International Dark Sky Park in the Republic of Ireland in 2016, consisting of Ballycroy National Park and the adjacent Wild Nephin Wilderness in County Mayo. The low population density of Mayo and a territory largely unsuitable for agriculture have left the area devoid of major cities, rendering its night skies very dark. The park seized on the value of this local resource as a means of promoting regional tourism and has undertaken efforts to educate residents of nearby villages about dark skies and ways they can help protect Ballycroy and Wild Nephin.

### **Grand Canyon National Park (Arizona, U.S.)** International Dark Sky Park

Perhaps the most famous and widely recognized national park on Earth, the Grand Canyon is among the world's seven 'natural wonders.' Protecting night skies over the Canyon is a significant challenge, given that the park contains a village of some 3,000 residents and staff have inventoried over 5,000 light fixtures, but the rewards are significant for views that U.S. President Theodore Roosevelt wrote are "absolutely unparalleled throughout the wide world."

### **Warrumbungle National Park (New South Wales, Australia)** International Dark Sky Park

This national park in the remote northern reaches of New South Wales is the first International Dark Sky Place designated in Australia. In addition to its spectacular daytime vistas, the park has long been known for the quality of its dark night skies. In the 1950s, seeking relief from the light pollution of Canberra that had negatively impacted its Mount Stromlo Observatory, the Australian government relocated major operations to a new observatory at Siding Spring. Lessons learned at Mount Stromlo encouraged early conservation of dark skies in the area, including in the park, to protect the national investment in Australia's professional astronomy infrastructure. Warrumbungle's new IDA status is a natural extension of the work it has done for years to contain threats to the observatory site through outdoor lighting policy and regional planning.

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**Additional Dark Sky Places Certified in 2016:**

**International Dark Sky Parks:**  
Big Cypress National Preserve (Florida, U.S.), Capulin Volcano (New Mexico, U.S.), Dead Horse Point State Park (Utah, U.S.), Flagstaff Area National Monuments (Arizona, U.S.), Goblin Valley State Park (Utah, U.S.), Great Basin National Park (Nevada, U.S.), Kissimmee

Prairie Preserve State Park (Florida, U.S.), Salinas Pueblo Missions (New Mexico, U.S.), Stephen C. Foster State Park (Georgia, U.S.)

**2016 International Dark Sky Communities:**  
Moffat (Scotland, UK), Village of Oak Creek (Arizona, U.S.)

## IMPACT AT A GLANCE

Chapters drive grassroots-level impact in their communities

- IDA Phoenix Chapter successfully persuaded the city of Phoenix, Arizona to adopt 2700 Kelvin LED replacement streetlights
- Mexico and Texas Chapters held large events to engage thousands of people in their communities around the importance of dark skies

## IDA CHAPTERS

Chapters offer the grassroots efforts that make IDA an impactful, effective organization both in the U.S. and around the globe. In July 2016, Katherine Gader joined the staff as the IDA Chapter Coordinator. Katherine has reinvigorated IDA Chapters and brought energy and new ideas to the on-the-ground efforts to spread awareness about light pollution. Katherine also works in close collaboration with the newly formed Grassroots and Empowerment Committee which provides guidance, support tools, and resources to IDA Chapters, and will increase the effectiveness of the chapters and other grassroots-led efforts moving forward. Here are a few areas where chapters had an impact in 2016:

### Policy

IDA relies heavily on its chapters to advocate at the local government level on light pollution issues, such as ensuring that the new LED lighting installed meets IDA standards. The IDA Phoenix Chapter successfully persuaded the city of Phoenix to adopt a 2700 Kelvin color temperature for all of the 100,000 luminaires that it is set to replace. Many other chapters such as IDA Duluth and IDA Chicago have also worked hard advocating for warmer LED lighting in their communities. IDA Chapters will continue to play a crucial role in public policy.

### Community Involvement

Through star parties, presentations, and other events, IDA Chapters provide important education to their communities about light pollution. The IDA Mexico Chapter engaged over 70 cities and 200,000 people in a conversation about everyone's right to dark skies through a national astronomy event called 'Noche de las Estrellas' ("Night of the Stars"). The IDA Texas Chapter held its first Texas Night Sky Festival in Dripping Springs, where nearly 3,000 people gathered to celebrate the night sky.

### Youth Leadership

The future of our night skies lies in the hands of our youth, like Charlie Goldberg, IDA's first youth chapter leader. Charlie has not only taken on a leadership role within the chapter but is helping to engage other Chicago youth in the fight against light pollution. Check out some of the other youth leaders who won our Rising Star Award: <http://bit.ly/ida2016awards>.

We are very excited to welcome our five newest chapters, IDA Rapid City, Iowa, U.S.; IDA Memphis, Tennessee, U.S.; IDA Erie and Crawford County, Pennsylvania, U.S.; IDA Berrien County, Michigan, U.S.; and IDA Tasmania, Australia. 2016 marked the 20th anniversary for Dark Sky Switzerland, which currently has over 400 members!



IDA Chapter Coordinator and LED Campaign Coordinator, Katherine Gader

# FIXTURE SEAL OF APPROVAL

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## IMPACT AT A GLANCE

The best way to protect the natural night environment is through the promotion of responsible outdoor lighting. The Fixture Seal of Approval program provides objective, third-party certification for lighting that minimizes glare, reduces light trespass and doesn't pollute the night sky

- IDA certified more than 1,000 Dark Sky Approved products in 2016
- Twelve new lighting manufacturers joined the Dark Sky Approved program in 2016

IDA's Fixture Seal of Approval (FSA) program certifies commercial and residential outdoor lighting as dark sky friendly. To be certified, lighting products must reduce light trespass and skyglow and minimize glare. All products approved for the program are required to be fully shielded and to lessen the amount of blue light in the nighttime environment.

In 2016, IDA expanded the [darksky.org](http://darksky.org) website to include a searchable database for Dark Sky Approved lighting products that meet commercial and residential consumer's needs, whether it be for mounting on a wall, patio, or walkway, or sea turtle friendly design. More than 40 companies now participate in the program with more than 1,000 products certified.

Also in 2016, IDA established new Fixture Seal of Approval guidelines to respond to the rapid emergence of new LED technology. Of critical importance was establishing a 3,000K upper limit to LEDs correlated color temperature. Lighting companies, designers and homeowners welcomed the new guidelines, as they see the FSA program as a helpful tool when choosing dark sky friendly fixtures.

The assortment of IDA approved fixtures continues to grow, including more than 70 regular and low voltage products designed for residential applications. Many can be found in home improvement stores as well as online sources. By working with leaders in the lighting design industry, IDA offers more residential FSA lighting products from which to select, including low voltage lighting.



# 2016 FINANCIAL STATEMENT

## FINANCIALS

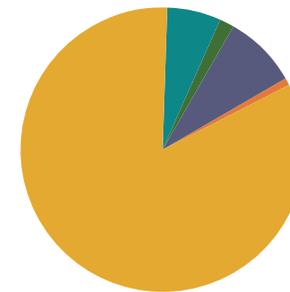
- IDA raised \$572,184 in unrestricted revenues in 2016
- More than 75% of funds raised by IDA went to programming, education and outreach in 2016

Between January 1 and December 31, 2016, IDA raised \$572,184 in unrestricted revenues. Thanks to our donors' generous support, IDA ended the year with a surplus of \$13,941, which will be applied to 2017 operations.

The following is a condensed breakdown of our 2016 sources of revenues and expenses. A complete financial statement as prepared by Ludwig Klewer & Company PLLC is available by request.

## REVENUE

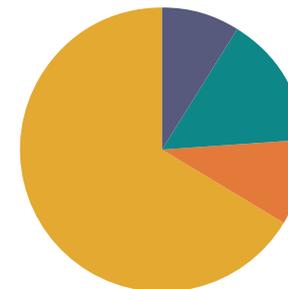
Membership & Donations	\$473,083
Programs & Special Events	50,390
Grants	35,000
Corporate Sponsorships	10,000
Promotions & Sales	3,711
<b>Total Unrestricted Revenue</b>	<b>\$572,184</b>



Membership & Donations	82.7%
Programs & Special Events	8.8%
Grants	6.1%
Corporate Sponsorships	1.8%
Promotions & Sales	0.6%

## EXPENSES

Programs	\$369,558
Fundraising	84,852
vEducation and Outreach	54,149
Administration	49,684
<b>Total Expenses</b>	<b>\$558,243</b>



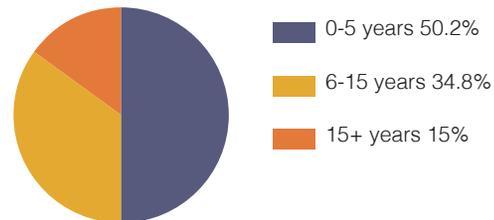
Programs	66.2%
Fundraising	15.2%
Education & Outreach	9.7%
Administration	8.9%

# MEMBERSHIP SURVEY 2016

## MEMBERS

IDA completed its first ever comprehensive membership survey in 2016. With an impressive 33.7% response rate, we were able to build a better understanding of who our members are and what they value. Here are a few highlights from the survey results:

MORE THAN 50% OF IDA MEMBERS HAVE JOINED WITHIN THE LAST 5 YEARS



APPRECIATING NATURE'S BEAUTY IS THE MOST IMPORTANT BENEFIT OF HAVING DARK NIGHT SKIES, ACCORDING TO MEMBERS

Appreciate nature's beauty  
Average 9.21 on a scale of 1-10



Stargazing with the unaided eye  
Average 9.18 on a scale of 1-10



Improved wildlife and ecosystem health  
Average 8.65 on a scale of 1-10



33% OF MEMBERS SPEND 1-2 EVENINGS PER WEEK STARGAZING



91.5% of members stargaze at least once per month

88.1% OF IDA MEMBERS LIVE IN THE UNITED STATES



United States United Kingdom Germany Other

## 2016 AWARDS

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## AWARDS

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### DAVID L. CRAWFORD LIFETIME ACHIEVEMENT AWARD

#### Bob Mizon

Bob Mizon has a proven track record in helping inform and influence government policy on artificial light at night in the UK. He has been coordinator of the UK Commission for Dark Skies nearly since its inception in the 1980s and, in this capacity, has worked with both government and industry to attempt to forge closer working ties. Bob was awarded the "Member of the Order of the British Empire," and was the recipient of IDA's prestigious Galileo Award in 2006.

*The David L. Crawford Lifetime Achievement Award commemorates IDA Co-Founder and former Executive Director Dave Crawford. The award is presented to individuals who have contributed an extraordinary effort to light pollution abatement in the course of their lifetime.*

### HOAG ROBINSON AWARD

#### Rod McConnell

Rod has been extremely active and successful in reducing light pollution in Canada. His light pollution abatement policies of "Light Efficient Community" (LEC) have been adopted in his hometown, neighboring communities and county governments, and are now being considered at the provincial level of Alberta.

One of Rod's earliest achievements was to revise Edmonton's lighting policies, laying the groundwork for a new lighting ordinance and, subsequently, the LEC. Rod remains active and continues his work to reduce light pollution by engaging and mentoring others, sharing his experience and educational resources, and consulting with policy makers to restore the night sky in Canada.

*The Hoag Robinson award is given to an individual who has been outstanding in educating governmental organizations, businesses and the public about the merits of outdoor lighting control ordinances.*

### GALILEO AWARD

#### Dr. Christopher Kyba

*This award is given once per year for outstanding achievements in combating light pollution in Europe and is presented at the European Symposium for the Protection of the Night Sky.*

### RISING STAR AWARD

#### Lora Callahan Starry Chicago

*The Rising Star Award is presented to students of any grade level – elementary school through university – who have demonstrated an interest in dark sky preservation and/or research by developing exceptional science fair projects, conducting research, or other activities coordinated with their schools or universities.*

### DARK SKY DEFENDER AWARD

Acadia Night Sky Festival Partners;	Simon Nicholas;
Jose A. Alicea Pou;	Dan Oakley;
Nathan Ament;	Elizabeth Padilla;
Fernando Avila Castro;	Apolonia Rodrigues;
Derek Demeter;	Scott Stantis;
Gene Fioretti, Cindy Malicki, Jim Malicki, Craig Weaver, Nicole Rodriguez;	STAR Communities;
Coyne and Vicki Gibson;	Dr. Robert Stencil;
Luke Gommerman;	Mac Stone;
Patricia Grauer;	Richard Stowe;
David B. Keida and Stephen A. Goldsmith;	Vicki Zinyk

*These awards are given to individuals and organizations in appreciation of their efforts on behalf of IDA and its mission to preserve night skies by promoting environmentally responsible outdoor lighting.*

INTERNATIONAL DARK-SKY ASSOCIATION  
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## HELP IDA PROTECT THE NIGHT SKY FOR PRESENT AND FUTURE GENERATIONS

YES!  
I WANT TO CONTRIBUTE

Name: \_\_\_\_\_ E-mail \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

### Membership Level

- \$35       \$500  
 \$50       \$1000  
 \$100      \$2000  
 \$250      \$3000 Lifetime

### Donation

Amount \$ \_\_\_\_\_

Pay by:  Check (payable to IDA)     Credit Card     Cash

Card Number: \_\_\_\_\_ Security Code \_\_\_\_\_

Expiration Date: \_\_\_\_\_

Card Holder: \_\_\_\_\_

Signature: \_\_\_\_\_