



Thanks to supporters like you, IDA is able to combine public awareness, technical assistance and extensive partnerships to reduce light pollution and its negative effects across six continents.

PAGE 2



Last year was a record-breaking year for our International Dark Sky Places program and 2015 is wrapping up to be no different. We expect to have about 15 new Places by the end of the year.

PAGE 5

NIGHTSCAPE

It Takes a Village

“I love supporting IDA because the work they do is so important and I know my contributions are going to innovative programs like Dark Sky Places and Parks and Protected Areas. We need IDA to protect night skies for the environment and so we can keep looking up at night and be truly inspired. Thank you, IDA!”

— Jill Nelson, IDA Member for 11 years



As IDA completes its 27th year of grassroots advocacy, outreach and providing technical support to reduce light pollution, we want to take a moment to reflect on the incredible generosity of our members and donors whose commitment to the cause and philanthropic spirit enable us to “make a difference”! Fully 70

percent ... seven pennies on the dime ... of IDA’s annual operating budget comes from its members and supporters like you! Whether small gifts or large, all are essential to our collective efforts to reduce light pollution and its many harmful environmental effects. From the bottom of our hearts, we thank you for your support!

The time-tested adage of “it takes a village” couldn’t be more apt when it comes to your financial commitment to IDA. With each and every gift, we

continued on page 2

AGM 2015

November 14 and 15, 2015
Phoenix, Arizona

Leading scientists will join us to share their research findings and insights on how light pollution is impacting the behavior of wildlife.

PAGE 6

Our Stunning Night Skies Annual Calendar is Back!



Our annual calendar is back with more stunning night skies photos by renown photographers from across the globe. Help IDA save night skies and get this beautiful calendar – all for a gift of \$50 or more. And don’t forget, these gorgeous calendars make for great holiday gifts.

This limited edition calendar is very popular and sold out last year. Get yours now by contributing your gift online at darksky.org/calendar.

continued from page 1

set our sights ever higher to achieve greater change so future generations can revel in the magic and wonder of the night sky.

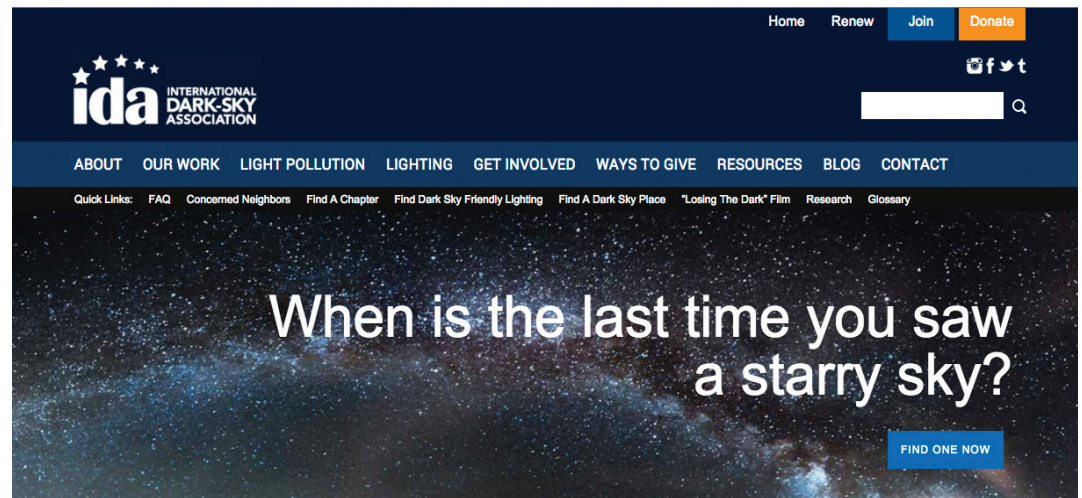
As we enter the “season of giving,” we ask that you open your hearts and provide the necessary financial support so that IDA – the *only* organization in the world whose sole purpose is to preserve and protect our night skies – thrives as the globe’s leader in combatting light pollution.

“I was dumbfounded when I learned that IDA has only five staff members responsible for most of the organization’s program delivery! Given the professionalism, the breadth of impact, and the responsiveness of the team in Tucson, Arizona, I’d simply assumed there were dozens of staff members. Now, more than ever, I’m convinced that IDA is one of the most soundly run and well managed nonprofit environmental organizations around, and they will continue receiving my full support. I remember clearly seeing the Milky Way from my home in South Florida and I want to preserve that view for my children and other generations to come.”

—Jeff Cooper,
IDA member for 15 years

IDA Striving to Improve Communications

You’ve probably noticed some changes to the look and feel of our communications. We’ve been working hard to make the way we communicate more effective, informative and appealing.



Changes are Afoot ...

In late July, we launched our new website and blog and it’s been a great success. The number of visitors to our site has more than doubled! Our new blog provides fresh and interesting content from IDA, outside experts and more. We envision the IDA blog to become the definitive one-stop-shop for all things light pollution and dark skies. (If you or someone you know has a great idea for a post, contact Cheryl Ann at cherylann@darksky.org.)

Following the launch, we updated *Night Watch*, our e-newsletter, and have received a lot of positive feedback. And ... you’re probably noticing that *Nightscape* looks different, too.

This new and condensed *Nightscape* is the first step in our plan to gradually phase out the publication, replacing it with timely and informative news from our blog and renovated *Night Watch*, keeping you apprised far more regularly than *Nightscape* allowed us to do. But don’t worry, we’re giving you a year to adjust to this new landscape. Until then, there will be three issues of *Nightscape* in 2016, which includes our annual report.

So, why are we doing this?

There’s been a significant decline in the number of IDA members who still opt to receive a paper copy of the publication and, based on industry trends and changing technologies, this number can only be expected to decrease. To remain relevant and abreast of our peers in the nonprofit sector, we’re migrating much of our remaining paper-based communications to an online format.

This new approach represents a significant savings to IDA, both in staff time and financial resources, that can be redirected into our programs. We want to make sure your dollars make the biggest possible difference in fighting for dark skies! Retiring the paper version also aligns with our mission to reduce environmental impacts on the planet.

So, how can you get ready?

If you haven’t already, start reading *Night Watch* and our online blog at darksky.org for the most up-to-date information about IDA, light pollution and dark skies. If you have any questions or comments, please contact Cheryl Ann.

IDA Earns National Environmental Award



Howard Wiig (right), IDA Hawaii chapter leader, accepting the NAEP Award on behalf of IDA from Robert Cunningham, the NAEP Awards Committee Co-Chair, at the NAEP Annual Awards Ceremony held in Hawaii

We're excited to announce that IDA received a 2015 National Environmental Excellence Award for our International Dark Sky Places program. The award, granted by the National Association of Environmental Professionals, was given for outstanding environmental contributions in the area of public involvement and partnerships.

"We are so thrilled to receive this award and want to applaud all of our Dark Sky Places for their inspiring commitment to night sky protection," said IDA Executive Director Scott Feierabend. "They're the ones on the ground doing this important work."

Efforts to obtain a designation can take up to several years depending on the site and often require significant collaborations with public officials and surrounding businesses and communities.

"Although we are a resource during the application process, the real legs of the program are the individual efforts of local citizens," said IDA Program Director John Barentine. "Volunteers educate their community about light pollution, do night sky quality surveys, and collect donations to support good lighting."

Looking Ahead ...

Thanks to supporters like you, IDA is able to combine public awareness, technical assistance and extensive partnerships to reduce light pollution and its negative effects across six continents.



turers, city planners, legislators and scientists to provide high-quality lighting options that combat light pollution, reduce energy waste and the harmful effects on humans, birds and other wildlife.

And with your help, in the upcoming year, we'll continue and increase initiatives to protect and preserve the night skies worldwide through our Dark Sky Places, Sea Turtle Conservation and Parks and Protected Areas programs.

Through education, policy change and IDA's Fixture Seal of Approval program, we will continue working with manufac-

We will also be developing, updating, translating and disseminating education and outreach materials to the general public, IDA members, municipalities and others to raise awareness of the issue of light pollution and ways to mitigate its harmful effects on humans and the environment.

Stay tuned for more details on our exciting work to come.

CHAPTERS

Australia, Österreich/Austria, Canada (4), República de Chile/Chile, Česká Republika/Czech Republic, 中国/China(4), India, Éire/Ireland, ישראל/Israel, Ελλάδα/Greece, 香港/Hong Kong, Magyarország/Hungary, Italia/Italy, 日本/Japan, Repubblika ta' Malta/Malta, México/Mexico, Schweiz/Switzerland, Slovenija/Slovenia, South Korea (3), Sverige/Sweden, United States (38)

AFFILIATES

België/Belgium, Canada, Deutschland/Germany, France, Nederland/Netherlands, Polska/Poland, United Kingdom, Türkiye/Turkey, United States (4)

BOARD OF DIRECTORS OFFICERS

President: Jim Dougherty

Vice President: J. Kelly Beatty

Secretary: Diana Umpierre

Treasurer: Nels Leutwiler

DIRECTORS AT LARGE

James R. Benya, Christopher Kyba, Christian K. Monrad, Martin Morgan-Taylor, Dr. Mario Motta, Scott Roberts, Tim Shotbolt, Leo Smith, Connie Walker

IDA STAFF

Editor: Cheryl Ann Bishop

Writers: IDA Staff

Executive Director: J. Scott Feierabend

Program Manager: John C. Barentine

Communications & Public Affairs

Director: Cheryl Ann Bishop

Membership Director: Susan Ciarniello

Designer: Ginger Cross

NIGHTSCAPE

Address corrections and submissions: editor@darksky.org. Nightscape is a publication of the International Dark-Sky Association.

International Dark-Sky Association

3223 N. First Ave., Tucson, AZ 85719 USA

Tel: +1 520 293 3198

Fax: +1 520 293 3192

website: www.darksky.org

email: ida@darksky.org

For more information contact:

editor@darksky.org

Chilean Observatory Becomes World's First Dark Sky Sanctuary

In August IDA announced the creation of a brand-new type of International Dark Sky Place. "Dark Sky Sanctuaries" are public or private lands of exceptional night sky quality whose nocturnal environments are protected for their scientific, natural, cultural or educational value. We created this new designation to protect areas that don't otherwise qualify as

ments. While Dark Sky Parks and Reserves face short-term and nearby threats to the quality of their night skies, Sanctuaries likely won't be confronted with light pollution for years to come.

The first site to receive this prestigious new designation is the Gabriela Mistral International Dark Sky Sanctuary in

the Elqui Valley of northern Chile. The Sanctuary hosts the Associated Universities for Research in Astronomy Observatory, one of the world's premiere facilities for professional astronomical research.

The Sanctuaries are named after the Chilean Nobel prize-winning poet Gabriela Mistral (1889-1957) who grew



Gabriela Mistral Dark Sky Sanctuary in the Elqui Valley of northern Chile, the first in the world. Photo Credit: Anja von der Linden

Dark Sky Parks or Reserves and to draw attention to the rapid pace with which they are disappearing worldwide.

Sanctuaries are typically among some of the most remote and undeveloped parts of the world, where human activity may be limited in order to preserve fragile nocturnal environ-

"Dark Sky Sanctuaries" are public or private lands of exceptional night sky quality whose nocturnal environments are protected for their scientific, natural, cultural or educational value.

up in the Elqui Valley and whose poetry reflects a love for the area's dark night skies.

The new Sanctuary is the first Dark Sky Place with a professional observatory and provides a model for many other ground-based astronomical research facilities, where the protection of dark skies is critical to their mission. AURA has worked closely with the Chilean government, which has passed a number of outdoor lighting regulations designed to save energy.

"The Observatory night skies are a resource that belongs to all Chileans as an important part of their heritage," explained Former AURA Observatory Director Dr. Malcolm Smith.



AURA Observatory (Chile)
Elqui Valley, Chile
Designated 2015
Land Area 364 km²
www.darksky.org/aura

Dark Sky Places Program Still Thriving

Last year was a record-breaking year for our International Dark Sky Places program and 2015 is wrapping up to be no different.

A nighttime view from the summit of Ben Lomond Mountain above Utah's North Fork Park International Dark Sky Park. Photo Credit: Casey Grimley



Since the last issue of *Nightscape* was released, we've added 11 new Places – three Dark Sky Communities and nine Dark Sky Parks. We expect to have about 15 new Places by the end of the year, likely surpassing last year's record. The following are a few highlights of the latest additions to our Dark Sky family.

Kaibab Paiute Indian Reservation

The Kaibab Paiute Indian Reservation is the world's first "Dark Sky Nation." A community of about 250 residents, it's located on the Arizona-Utah border some 80 kilometers north of the Grand Canyon. The reservation's Dark Sky Community status represents the first time in the history of the Dark Sky Places Program in which an entire group of ethnically and linguistically related people have come together to collectively embrace dark sky principles. This designation is helping increase awareness among Native Americans about night sky protection. "We need to smile when we look up to the sky at night," explained a Kaibab Paiute tribal elder, "not squint and frown and look down."



De Boschplaat

A protected area on the eastern end of Terschelling, one of the West Frisian Islands off the coast of the northern Netherlands, De Boschplaat is the first place in Holland to receive a dark sky designation. This is a remarkable achievement, as the Netherlands is one of the most light-polluted nations on Earth. The park consists of a series of salty marshes and tidal flats interspersed with walking trails. Terschelling, a barrier island off the coast of the Dutch mainland in the Waddenzee, a UNESCO World Heritage Site, helps protect the area against extensive local development. Nonetheless, park officials continue to work with coastal cities on reducing light pollution.

Utah's Breaking Records

Recent years have seen a significant uptick in interest about the Dark Sky Places Program from the state of Utah. Situated in the American West, the rugged landscape consisting heavily of protected public lands and relatively low population density make Utah prime territory for new Dark Sky Places. Utah now leads U.S. states with a total of five certified Dark Sky Parks. One of the new additions, North Fork Park in the Wasatch Mountains east of Salt Lake City area, prides itself as the first Dark Sky Park near a major metropolitan area. Its location is within an hour's drive of nearly two million people living along the Wasatch Front. Janet Muir of Ogden, who led the park's certification efforts, hopes the new designation is the start of a dark skies movement across northern Utah. "North Fork Park can be said to be the northern anchor for the largest concentration of designated and aspiring International Dark Sky Parks in the world," Muir said.

DARK SKY PLACES

Dark Sky Communities

Bon Accord, Alberta, Canada

Westcliffe and Silver Cliff, Colorado, U.S.

Kaibab Paiute Indian Reservation, Arizona, U.S.

Dark Sky Parks

Black Canyon of the Gunnison National Park, Colorado, U.S.

Canyonlands National Park, Utah, U.S.

Capitol Reef National Park, Utah, U.S.

De Boschplaat, Netherlands

Elan Valley, Wales

North Fork Park, Utah, U.S.

Pickett Civilian Conservation Corps Memorial State Park and Pogue Creek Canyon State Natural Area, Tennessee, U.S.

Staunton River State Park, Virginia, U.S.

Dark Sky Movement Loses 3 Impassioned Advocates

We are so grateful for the work of three committed individuals and truly saddened by their loss. These three passionate and dedicated dark sky advocates were on the ground making a difference! And they will be sorely missed. Our hearts go out to their friends and families.

Graham Cliff, Manchester, England (1950-2015)

Graham was active in the construction of the old ADAS Observatory in Timperley, England, and also instrumental in acquiring and constructing the clubhouse which was built around the same time.

In recent years, Graham became active in the Campaign for Dark Skies (now known as the Commission for Dark Skies), and was appointed the North West Regional Coordinator. He was initially active on the CfDS Yahoo Group Forum, but in later years focused on the OutdoorLighting Forum. In his campaign against light pollution he set up the website www.lightpollution.org.uk, which has now been saved for posterity. He had also set up the earlier versions of the ADAS web-site.

Gail Clyma, New York City, NY (1935-2015)

Upon retiring from her position as the Director of Market Research for *Fortune* magazine, Gail enjoyed gardening at her second home in Westhampton and working tirelessly for dark skies. An IDA member of 20 years, Gail served on the Southampton Dark Sky Advisory Committee.

Gail was instrumental in the effort to convince the Long Island Power Authority to change out their unshielded floodlights to 'dark sky' friendly fixtures. She also helped, among other successful efforts, to shepherd the enactment of

New York State Outdoor Lighting Act, which took over ten years to be implemented.

"In the 'dark sky' community, we were lucky to have an advocate like Gail Clyma," said friend and IDA New York Chapter Leader Susan Harder. "She was persistent, well informed and stalwart in her efforts to help control light pollution. She will be missed."

Ray Stonecipher, Sturgeon Bay, WI (1928-2015)

Ray, an IDA member for 25 years, was a driving force behind current efforts to get Newport State Park, near the tip of the Door County Peninsula in Wisconsin, designated an International Dark Sky Park. He was leading the charge until this past June when his health declined and he had to step down.

Ray organized a small working group to complete the IDA application and thanks to Ray's dedication, a complete draft of the park's application was recently submitted to IDA. Ray was not just a leader in these efforts, he was also out in the field making sky brightness measurements.

A retired UW-Whitewater professor of astronomy, Ray was also instrumental in forming the Door Peninsula Astronomical Society. He and his wife Ruthie created the Ray and Ruthie Stonecipher Astronomy Center, now in use by thousands of students and visitors.

Up and Coming Research at the AGM

E.O. Wilson, an ecologist and conservation biologist, published his 1987 seminal paper, "The Little Things That Run the World (The Importance and Conservation of Invertebrates)." Participants attending IDA's 26th Annual General Meeting being held November 14-15 in Phoenix, Arizona, will hear first hand just how disruptive artificial light at night is to numerous species, and the ecosystems of which these "little things" are so integral.

We're fortunate to have leading scientists joining us to share their research findings and insights on how light pollution is impacting the behavior of wildlife.

One of those scientists is Callum Macgregor, a Ph.D. student in Ecology at the University of Hull, who is pioneering research into the effects of light pollution on moths and their pollination interactions with plants. Callum, who has been an enthusiastic moth-trapper, bird-watcher and naturalist for years, has learned that the important ecosystem process of nocturnal pollination may be under threat.

"People tend not to realize that moths are important pollinators, but we collated evidence from a whole range of habitat types on a global scale showing that they are," Callum explains. "It's just a case of out of sight, out of mind."

IDA Ramps Up Policy Work

In recent months IDA has kept busy advocating directly for the protection of night skies via comment letters, editorials, support of public policy efforts and calls to action.

This summer we sent a call to action to our members in New York to speak up about a light polluting art display that was to be projected onto the Empire State Building in New York City. At the same time, we submitted a letter to the editor of the *The New York Times* that ran several weeks later. Better late than never!

In March we submitted a comment letter to the U.S. Bureau of Land Management during the process of drafting the Management Plan and Environmental Assessment for the Harquahala Mountains Wilderness of west-central Arizona. Also that month, in concert with the Finnish Ministry of the Environment, we contributed content to a policy brief on light pollution for the United Nations 2015 Global Sustainable Development Report.



A policy issue we are tracking carefully is the conversion of municipal street lighting systems around the world to white LED from older lighting technologies. In June, Executive Director Scott Feierabend penned an op-ed in the *Arizona Republic* urging City of Phoenix leaders to slow plans to convert 90,000 streetlights to LED pending further study. Similarly, in September, we submitted a comment in response to the City of Chicago request for information on a proposed conversion of its 350,000-light system to LED.

We've also been involved in support of federal actions to protect public lands in the western U.S. for the benefit of

dark night skies. In collaboration with the Center for Biological Diversity, we contributed language describing the benefits of adding nightscape management to proposed federal legislation to create the Greater Grand Canyon Heritage National Monument in northern Arizona. For similar reasons, we signed a joint letter in September from a number of conservation

organizations in support of the naming of three new National Monuments in southern California.

IDA always looks for opportunities to weigh in on the creation of regional and national public policies supporting good outdoor lighting practices. In June we submitted a comment to the Massachusetts state legislature endorsing a bill that requires lighting on state-owned property and roadways to use full-cutoff fixtures. We also urged the legislature to amend the color temperature limit to 3000 Kelvin, bringing it in line with IDA Fixture Seal of Approval guidelines.

Unfortunately, this means the well-known attraction of moths to lights may have wider implications. Callum has shown that moths change their behavior around streetlights, and is investigating the effects on moth-pollinated plants.

"If pollination is reduced around streetlights, that could have serious consequences for road-verge and urban plant communities," Macgregor concludes.

This is but a small sampling of the thought provoking, fascinating and leading-edge science that will be on full display at this year's Annual General Meeting. We hope to see you there, so be sure to register now and so you're not "left in the dark"!

A promotional poster for the AGM 2015. The top left corner features the text "AGM 2015" in white on an orange background. To the right, the title "One Coin ~ Two Sides" is written in large white font. Below the title, the subtitle "Impacts of Light Pollution to Fish and Wildlife Resources and the Mitigating Role of Emerging Lighting Technologies" is displayed in a smaller white font. The central image shows a silver coin (a dime) with the profile of a man, set against a background of a sunset with silhouettes of birds in flight. A colorful, pixelated light trail extends from the coin towards the right. At the bottom, an orange banner contains the text "Annual General Meeting November 14 and 15, 2015 | Embassy Suites | Phoenix, Arizona" in white.

INTERNATIONAL DARK-SKY ASSOCIATION
3223 N FIRST AVE
TUCSON AZ 85719-2103
USA

NON-PROFIT
ORGANIZATION
US POSTAGE
PAID
TUCSON, AZ
PERMIT NO. 1902

Join us in our fight to stop light pollution.

Join IDA

Name: _____

Address: _____

City: _____ State: _____ Zip: _____ Country: _____

Email: _____ Phone: _____

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

Membership Level:

Card Number: _____

\$35 \$250

Expiration Date: _____

\$50 \$500

Card Holder: _____

\$100 \$1,000

Signature: _____

I would like to make
an additional donation.

\$ _____

Donate

I would like to make a tax-deductible donation. \$ _____

