



INTERNATIONAL YEAR OF ASTRONOMY 2009



Dark Skies are a Universal Resource: Programs Planned for the International Year of Astronomy

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Watch for updates at <http://astronomy2009.us/darkskies/>.



Overview

"Dark Skies are a Universal Resource" is 1 of 9 US key programs being developed for the International Year of Astronomy (IYA) in 2009. "Dark Skies Awareness" has also been selected as 1 of 11 cornerstone projects for the global effort in more than 100 countries, with a task group chaired by the United States. The goal of this theme is to raise the level of public knowledge about adverse impacts of excess artificial lighting on local environments and help many more people appreciate the ongoing loss of a dark night sky for much of the world's population. Related issues include the impact of light pollution on security, economy, human health and animal habitat. Toward this goal, a range of programs and resource materials are being utilized or developed which highlight dark sky preservation issues:

- Citizen-science campaigns to observe and measure local night skies, promoting personal involvement and local awareness
- The use of new media technology (e.g., programs at planetariums, blogging, podcasting) to share factual and practical information
- Weaving dark-skies education into complementary events such as star parties and observatory open houses
- Promoting dark-skies themes in arts, entertainment and storytelling (e.g., photo competitions, documentaries, lectures, native American traditions)

The programs & activities described below were developed by the IYA Dark Skies Working Group (DSWG) in an effort to reach as many Americans as possible. DSWG members & programs are listed at <http://astronomy2009.us/darkskies/>. Organizational partners on related events include 100 Hours of Astronomy (astronomy2009.org), Sidewalk Astronomy (www.sidewalkastronomers.us/) & National Dark Skies Week (www.ndsw.org/). For more information, email the Chair at cwalker@astronomy2009.us.

GLOBE at Night 2008 Results



GLOBE at Night

GLOBE at Night is a fun, fast, no-frills star counting program inviting citizen-scientists around the world to measure the amount of light pollution in their night sky. Led by the educational outreach staff at the National

Optical Astronomy Observatory and UCAR's GLOBE Program, GLOBE at Night has been chosen as a centerpiece of the IYA dark-skies theme. In its 3rd year, the GLOBE at Night program has two versions: one that uses the unaided-eye to match the appearance of Orion to one of 7 stellar maps of different limiting magnitudes & the other that uses a digital light meter to measure brightness in a patch of sky directly overhead. Data sets, maps & more information are at <http://www.globe.gob/GaN/>. The Astronomical League and Astronomical Society of the Pacific will use their programs and networks to expand GLOBE at Night in 2009. Workshops are being offered at astronomical & International Dark-Sky Association meetings. **The next GLOBE at Night campaign is scheduled for the last two weeks of March 2009.**



Astronomy Nights in the (National) Parks

Throughout 2009, dark sky observing will be highlighted within National Parks with near-pristine skies. Activities will include learning the night sky using planispheres and star atlases, workshops on the tools of astronomy and observing techniques, star counting programs, nature walks, daytime/nighttime viewing, and lectures on light pollution and astronomy. (Program is being led by DSWG members, Chad Moore and Dan Duriscoe of the National Park Service.)



Dark Skies Discovery Sites

Dark Skies Discovery Sites (DSDS) are in rural locations (e.g. a backyard observatory or a community park or school) where the public can gather to learn about the importance of dark skies.

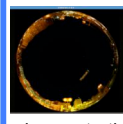
Beside learning how to address light pollution, programs can include constellation walks, telescope workshops, and night sky current events. For additional information email starsrus@infinet.com, using "IYA DSDS" in the subject line. Effort led by Terry Mann (President, Astronomical League) & Fred Schaaf (Sky & Tel).



Quiet Skies

Radio Frequency Interference, or RFI, is the radio equivalent of light pollution. RFI effectively blinds radio telescopes at certain frequencies, making it impossible to study the Universe at those frequencies. The Quiet Skies project (led by the National Radio

Astronomy Observatory) will introduce radio astronomy and the need for quiet skies to the public through a Quiet Skies kit loan program to schools and museums. Participants will measure the RFI levels in their communities and enter their measurements into a database. The RFI results will be graphically displayed similar to the striking "Earth at Night" light pollution image.



Planetarium Program

Let There Be Night takes advantage of the interactive capabilities of small and portable domes to advocate dark skies and to train participants for GLOBE at Night. The presentation options include a Pacific Northwest Nations story noting the balance between day and night; a demonstration about shielding lights; an in-dome reading of the book *There Once Was a Sky Full of Stars*; a presentation on GLOBE at Night and original content celebrating Galileo's discoveries. The *Let There Be Night* DVD, to be distributed by the Great Lakes Planetarium Association, will include other valuable digital content for dark sky advocates. Details are at www.LetThereBeNight.com. Efforts are being led by DSWG member, Chuck Bueter, and Karrie Berglund (Digitalis).



Good Neighbor Lighting

The program centers on the educational aspect of quality outdoor residential lighting. The inclusion of a "Good Neighbor Lighting" display in the American Lighting Association member showrooms is a fantastic educational tool and step towards presenting good neighbor lighting/energy efficient/dark-sky friendly lighting to the public in an area with the high potential impact. (Program led by Bob Crelin & IDA.)



6-Minute Video

Funding is being sought for a six-minute video tutorial on outdoor lighting issues. The video will support dark sky advocates when presenting lighting ordinance proposals to local governments, elected officials, architecture and design organizations, and the general public. The effort is being led by DSWG member, Chuck Bueter.



Social Networking via the Internet

In this program MySpace and Facebook web pages will introduce new audiences to dark sky issues. With a Second Life destination, visitors will interact with an outdoor lighting design and make changes to lessen glare, light trespass, and sky glow. (Effort led by New Media TG members, Pamela Gay & Adrienne Gauthier, & DSWG members, Chuck Bueter & Carter Smith.)



Podcasts

Podcasts will be created to communicate the need to protect dark skies. The 365 Days of Astronomy podcasts will include shows dedicated to light pollution. From the seasonal stories of Native Americans to the loss of dark skies, this podcast will take its listeners on 5-minute plunges into how the sky touches our society. Project led by Pamela Gay (NMTG).



Traveling Exhibits

Traveling exhibits are a wonderful method for providing outreach and education to communities on light pollution during events such as star parties, evenings in the park, or sidewalk astronomy. A traveling exhibit recently revised by the International Dark-Sky Association will be used. The effort is being coordinated by the International Dark-Sky Association & DSWG member, Kim Patten.



Earth and Sky Photo Contest

The Earth and Sky Photo Contest is where amateur photographers combine Earth and sky in one photo. The goal is for people "to see humanity as a family living together on a single planet amidst the vast ocean of our Universe", as well as to impress the public with the beauty and importance of dark skies. Check the *The World at Night* (TWAN) website, www.twanight.org, for contest information. The effort is being led by Babak Tafreshi (founder of TWAN) and Mike Simmons (founder of Astronomers Without Borders).



Earth Hour

Millions of people in cities across the U.S. and around the globe turned their lights off for 1 hour on Saturday, March 29, 2008 to make an unprecedented and highly visible global statement in support for action on climate change, energy conservation & light pollution. The organizer, the World Wildlife Fund, is gearing up for next year's Earth Hour on March 28, 2009 from 8:30-9:30pm, on the last night of GLOBE at Night. For more information and how sign up for the next Earth Hour, visit www.EarthHour.org.



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