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Our Light or Starlight? Citizen Science, Public Involvement and You

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With half of the world's population now living in cities, many urban dwellers have never experienced the wonderment of pristinely dark skies and maybe never will. Light pollution is obscuring people's long-standing natural heritage to view stars. The GLOBE at Night program (www.globeatnight.org) is an international citizen-science campaign to raise public awareness of the impact of light pollution by encouraging everyone everywhere to measure local levels of night sky brightness and contribute observations online to a world map. In the last 5 years, GLOBE at Night has been the most productive public light pollution monitoring campaign, collecting over 52,000 observations in a two-week period annually. This year, during the moonless two weeks in March, the campaign set a record high of over 17,800 measurements from people in 86 countries. Foundational resources are available to facilitate the public's participation in promoting dark skies awareness. The GLOBE at Night website explains clearly the simple-to-participate-in 5 step program and offers background information and interactive games on key concepts. The program has been expanded to include trainings of the general public, but especially educators in schools, museums and science centers, in unique ways. Education kits for dark skies awareness have been distributed at the training workshops. The kit includes material for a light shielding demonstration, a digital Sky Quality Meter and "Dark Skies Rangers" activities. The activities are on how unshielded light wastes energy, how light pollution affects wildlife and how you can participate in a citizen-science star-hunt like GLOBE at Night. In addition, projects are being developed for what to do with the data once it is taken. The GLOBE at Night data from different years can be compared to look for trends over time or with population density maps. The data can also be used to search for dark sky oases or to monitor lighting ordinance compliance. Most recently the data has been compared with telemetry of the Lesser Long-Nose Bat near Tucson, Arizona to examine whether or not the bats are preferentially staying in darker areas. The presentation will highlight the education and outreach value of the program's resources and outcomes in communicating awareness with the public and attracting young people to study science.

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