

Knowing What is Best

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Abstract. Already, and with good reason, light pollution is recognized as one of the most damaging legacies that current “civilization” is bequeathing to its children. Denying them the opportunity, even the right, to experience visually the majesty and awe of the universe has obvious repercussions for our science, and other contributors to this meeting are addressing those eloquently. But it is also critically important to place light pollution in the cadre of the general environmental degradation which unbridled technology is causing. The amount of power consumed by one outdoor light is only a minuscule drop in the ocean, but enough of those drops make an ocean. Using low-wattage bulbs, and getting more power out of them via halogen or LED technology, can ease the drain on the supply of power, but when several can be run, and run brighter, than a single tungsten lamp and cost is the only goal, the consumer simply installs more of them.

We all hope for a restored and sustainable environment, but the challenge is first to learn and practice the essential difference between “want” and “need”. A more specific challenge is to educate the affluent countries about the deleterious effects of nighttime lights on human health and on other bio-systems and species, and to explain the truth about “security” issues. If astronomers place the needs of their own science too foremost they risk the criticism of selfishness: why are our own scientific requirements more important than the pleasure and health benefits of a whole town in pursuing sports activities outdoors after sunset? How can the need to illuminate streets, intersections, parking lots and to deter intruders be less necessary for personal and community safety and wellbeing than some rather esoteric scientific opportunities for a small population of astronomers?

Dark Sky Preserves are a lovely concept but they are not the full answer; reducing light pollution is the responsibility of every citizen, and ensuring good astronomical conditions in a few remote parks must not excuse the prevailing cavalier attitudes that are causing light pollution to be blithely accelerated everywhere else.

The solution is Education, and for astronomers the key is to tone down the astronomically important and to emphasize the many general benefits of reducing light pollution. It is only when the non-astronomical community starts offering the astronomical advantages too of its own volition that we will see true progress in fighting this most pervasive of modern environmental disasters.