

## **Declaration of Genk**

## 5th European Symposium for Protection of the Night Sky

We, the participants at the 5th European Symposium for Protection of the Night Sky:

- are unanimously concerned about the vanishing night skies and the rapid growth of light pollution in Europe and the world. This light pollution is characterized by increasing glare, energy waste, sky glow and harm to the nighttime environment;
- note that some European countries have taken action to control light pollution as evidenced by national and regional laws, zoning restrictions, educational campaigns and research;
- note that recent scientific research indicates that excessive outdoor lighting may have a serious impact on human health and adverse impacts many forms of wildlife. Quality lighting can reduce these adverse impacts;
- note also that studies show that a large number of citizens want to be able to appreciate the night skies and protect the nighttime environment;
- therefore the participants to the 5th European Symposium for Protection of the Night Sky request that all European national and regional governments take action to control light pollution;
- therefore the participants to the 5th European Symposium for Protection of the Night Sky request that the European Union, in particular the European Commission take action to develop a European Directive in which the member states are obliged to adopt European outdoor lighting standards in national or regional legislation and to take actions on monitoring, decreasing and preventing light pollution. These actions should include:
- -- educational campaigns for citizens, lighting designers, architects, local authorities and all other parties involved with outdoor lighting;
- -- development of outdoor lighting laws and standards. High quality lighting can reduce light pollution, and it can reduce the negative effects on human health and the environment. Therefore, the following rules should be adopted:
  - lighting should be avoided in areas without human population, except when it is absolutely necessary for traffic or pedestrian safety;
  - light fixtures used for traffic should always be designed and installed so that the light does not shine above 15 degrees under the horizontal plane, unless it isn't possible by technical means:

—all lighting fixtures should be designed and installed so that lighting outside the area to be lighted is minimized;
— the Commission Internationale de l'Eclairage (CIE) documents and European norms for lighting levels should be respected and regularly updated. In addition, <b>maximum</b> lighting levels must be established to minimize light pollution and energy waste;
— advertising lighting should have maximum lighting levels established, with downward directed lighting, and drivers and pedestrians should not be blinded by glare;
<ul> <li>— wherever possible, all outdoor lighting should be dimmed or turned off after close of business and at times of lower traffic levels;</li> </ul>
— monument and facade lighting should be tightly controlled to reduce glare, light intrusion and sky glow, and it must be switched off after midnight, except in tourist centres. Lighting levels should be established so that energy is not wasted;
<ul> <li>greenhouse lighting must be shielded in all directions;</li> </ul>
- Support of additional research on the following topics are recommended:
— the supposition that more lighting will defeat crime may not be true. Scientific studies are urgently needed to determine the actual impact of lighting on crime;
<ul> <li>additional research is needed to determine the impact of lighting on traffic safety;</li> </ul>
— it is now evident that there are many adverse impacts of artificial lighting on wildlife and humans. Additional research is needed to prevent irreversible changes in biodiversity in both flora and fauna, adversely affecting ecosystems and human health;
— new energy efficient technologies are needed to better control climate in

We encourage everyone to financially support replacement of bad lighting with the best available lighting technologies that conserve energy, reduce glare, control light intrusion, protect the nighttime environment, and increase access to dark skies.

We further declare that quality nighttime lighting is available now and that everyone benefits from better quality lighting. Everyone should use the correct amount of light when and where it's needed. People would then see better, save energy and protect the nighttime environment.

## Signed by all attendees on 30 April 2005

shielded greenhouses;

International Dark-Sky Association
Astronomical League (265 societies)
Association Nationale pour la Protection du Ciel Nocturne, France
IDA Italy
The BAA Campaign for Dark Skies
Fachgruppe Dark Sky Vereinigung der Sternfreunde Deutschland
Werkgroep Lichthinder of the VVS, Belgium
Preventie Lichthinder vzw, Belgium

Bond Beter Leefmilieu Vlaanderen vzw, Belgium
Astrolab Iris, Astronomische Contact Groep vzw, Ieper, Belgium
Hungarian Astronomical Association
Platform Lichthinder Netherlands
Ustvarjalno astronomsko drustvo, Slovenia
Europlanetarium vzw, Genk, Belgium
Jongeren Vereniging voor Sterrenkunde Descartes, Genk, Belgium
Jongeren Vereniging voor Sterrenkunde Quasar, Oostende, Belgium
Institut d'Astrophysique et de Géophysique, Université de Liège, Belgique
Universidad Nacional de Tucuman, Depto. Luminotecnia Luz y Vision, Argentina
Polytechnic University of Catalonia, Spain
Verein Kuffner Sternwarte, Austria