

**Report on the DARKSKY 2008 EUROPEAN SYMPOSIUM
August 22-23, 2008 in Vienna, Austria**

Connie Walker

I. TOPICS OF THE MEETING

The topics of the talks during the meeting included:

- Regulations, laws, policies (Mohar from Slovenia; Baddiley, Mizon and Morgan-Taylor from the U.K.)
- Effective lighting and energy efficiency (Haenel from Germany; Midavaine from France)
- Affects in Health (Kloog from Israel)
- Affects on Wildlife (Pfiffinger from Austria)
- Ways of measuring sky brightness (Hollan from the Czech Republic; Haenel from Germany; White from Ireland; Aubrecht (Austria) on behalf of Elvidge (US)
 - luxmeter, cameras, SQMs, satellite imagery
- Modeling light pollution (Spoelstra from the Netherlands; Visnjan Ed. Ctr staff from Croatia)
- Outreach programs (Wuchterl from Austria; Walker from US)
- Dark Sky Preserves/Reserves (Zoltan and Gyarmathy from Hungary; Owens from UK)
- Industry (Haberstroh from Austria)

Abstract contributions for the meeting can be found at http://darksky2008.kuffner-sternwarte.at/proceedings/DS2008_Contributions.pdf.

Live presentations were available on Second Life during the conference at <http://darksky2008.kuffner-sternwarte.at/2ndlif.html>. Once a host is found, the files of the powerpoint presentations will be posted and available.

II. WHO WAS AT THE MEETING:

There were about 60 participants from 15 countries. <http://darksky2008.kuffner-sternwarte.at/participants.html> has a listing of the participants. In particular, of the 22 Europeans that are part of the IYA DSA Task Group, 9 were at the meeting (albeit one via Second Life, Yuki Kaneko) and a tenth person (Thomas Posch from Austria) asked to join. The existing members attending the conference were:

NAME	COUNTRY
Guenther Wuchterl	Austria
Friedel Pas	Belgium
Andreas Haenel	Germany
Kollath Zoltan	Hungary
Albert White	Ireland
Julia Romanowska	Poland
Yuki Kaneko	Turkey
Darren Baskell	United Kingdom
Steve Owens	United Kingdom

TABLE of COUNTRIES EMBARKING ON DARK SKIES EFFORTS

COUNTRY	GLOBE at Night and/or How Many Stars?	Earth Hour	Photography	Light Pollution Group(s)	Radio Frequency Interference	Modelling LP Data	Measurements w/ Instruments	Dark Sky Preserve	100 Hours	COMMENTS
Austria	X			X			X			IDA, themes every 3 months; affects on wildlife
Belgium	X	(x)		X						a "Lights Out" event
Croatia	(x)		X	X		X				various publications, nighttime observations; legislaion/technology; LP measurements w/ cameras; Modeling - Visnjan Ed Ctr
Czech Republic	(x)			X			X			
England	(x)			X	(X)	X		X		IDA, BAA'S CfDS, UK is promoting DSA w/ tons of activities; regulations (UK)
Finland	(x)			X						website to estimate limiting magnitude
France	(x)	X		X					X	effective lighting
Germany	X	(x)		X			X		X	traveling exhibits, various publications, powerpoint, a "Lights Out" event; effective lighting
Greece	(x)			(x)						IDA, LP Program (for students)
Hungary	(x)	X		X				X		mobile exhibition, joint efforts with CIE planned
Ireland		X		X			X			
Italy	(x)			X	X	X	X			IDA, LP Science and Technology Institute (publications too), activities w/students
Malta	(x)			X						IDA, projects on LP, on World Heritage site, & with UNAWE
Netherlands	(x)			X		X				Modeling - Platform Lichthinder
Poland	(x)									portal to astronomy--> GaN, Ciemne Niebo

Portugal	(x)	(x)								a "Lights Out" event, summer star parties
Romania	(x)		X							
Scotland	(x)			X				X		DS Scotland's DS parks
Serbia				X						promoting DSA
Slovakia	(x)			X						promoting DSA
Slovenia				X						IDA; regulations
Spain	(x)			X						several regional groups
Sweden	(X)			X				X		Galileoscope
Switzerland	(x)			X						IDA

III. WHAT IMPORTANT ISSUES WERE DISCUSSED AT THE MEETING

Important issues are defined as issues relevant to the IYA Dark Skies Projects, nationally and internationally. The areas of interest each country expressed in preserving dark skies were noted in the table above. Please note that this is a perpetually evolving table. (Feedback welcome.)

The table shows the dark-skies related programs that these countries have embarked on and will continue to (denoted by the "X" in the table). The table also shows programs these countries intend to embark on this year (denoted by the "(x)"). Many of these programs will be promoted on the IYA DSA website and the U.S. IYA Dark Skies website, where appropriate. To that end, various experts were asked by Connie to contribute to the website(s) and/or IYA Dark Skies programs in the following ways:

- Darren Baskill (UK): will offer **web support** on the IYA DSA website. He is willing to put materials on 10-20 web pages during his vacation time.
- Martin Morgan-Taylor (UK): will write up a summary on efforts toward **regulations** for dark skies preservation in England and worldwide.
- Andrej Mohar will also write up the regulations efforts in Slovenia.
- Chris Baddiley (UK) will let us link to one of his latest papers on **modeling** or place it on the DSA website. (He won the Galileo Award from IDA Europe at the Darksy 2008 meeting for his contributions in modeling sky brightness.)
- Jan Hollan (Czech Republic) and Henk Spoelstra (Netherlands) will join the subgroup on modeling and contribute to the DSA web page as well. Henk will be sending me a comparison of brightness scales in various units.
- Thierry Midavaine (France) asked the DSA Cornerstone to help acquire the newest release of the NOAA DMSP data and the newest release of Cinzano et al's modeling results.
- Bob Mizon is interested in test-bedding the DS **planetarium show** (Let There Be Night).
- Andreas Haenel is interested in the DS planetarium DVD but is working on his own big show in German, so he will not be able to translate.
- _____ is also interested in test-bedding the DS planetarium show.

- Jan Hollan (Czech Republic) and Zoltan Kollath (Hungary) (With Istva'n Gyarmathy) will form the foundation of a subgroup on using **cameras to do photometry** to determine sky brightness and come up with an explanation of how the public can get involved this way. The Hungarians have a digital camera (DSLR) program like the US NPS. Perhaps Georg Zotti (Austria) might like to join the subgroup.
- Jan Hollan (Czech Republic), Andreas Haenel and Zoltan Kollath and Istva'n Gyarmathy (Hungary) are experts in using **SQMs** and interpreting their results. Connie will ask them to supply a write up (human interest story) on the use of SQMs in their programs. (Connie would like to get Andreas's powerpoint presentation from the meeting.)
- Zoltan Kollath would be willing to translate SQM and unaided-eye results for GLOBE at Night web pages. (This needs clarification.)
- Albert White (Ireland) after talking to Robert Hill will try to put some aspect of their **game** on the DSA web site. He will also write up a description on the **dark sky reserves** in Ireland.
- Istva'n Gyarmathy (Hungary), Steve Owens (UK), Andrij Mohar (Slovenia) along with Robert Hill (not at the meeting) (Scotland) are interested in forming the foundation of a subgroup on dark sky reserves. Would like to be tied more into what the US National Park Service is doing. Some are interested in doing or are doing sister park programs.
- Andrej Mohar (Slovenia) asked if an ad for the Darksky 2009 meeting and camp can be posted on the DSA and IDA web sites. (Yes.)
- Thomas Posch (Austria) wants Austria to participate in the **100 Hours**, wants Austria to establish a dark sky reserve, wants to contribute to a podcast on dark skies, and wants my powerpoint presentations on the DSA Cornerstone web page. He also wants to serve on the DSA Task Group. Thomas is involved in a 50-minute **documentary** called "The Darkside of Light". It was done by a German film crew, but is already in English.
- Germany, France and Sweden want to participate in the 100 Hours of Astronomy as well.

IV. WHAT ACTION ITEMS CAME OUT OF THE MEETING

Action items that have come out of the Darksky 2008 European Symposium are for Connie to follow-up with the bulleted items in the section above. Action items slated to be addressed while at the meeting included:

- Finding candidates for DSA coordinator
- Finding ways to unify the GLOBE at Night (GaN), How Many Stars (HMS) and Great World Wide Star Count (GWWSC) programs for IYA
- Seeing what countries are interested in participating in Earth Hour
- What the plans were for dark skies events/activities in the different countries during IYA
- What countries would be participating in DSA-related events/activities during IYA
- Discussing the Starlight Reserve document from Cipriano Marin

Finding candidates for DSA coordinator

Connie scouted for possible DSA coordinators.

Finding ways to unify the GaN, HMS and GWWSC programs for IYA

After a discussion, Guenther Wuchterl and Connie Walker wrote the following ideas down:

1. Unify the programs in time: there is always at least one program active: GaN in March, HMS in January, February, April-September, November and December, GWWSC in October.
2. Together the programs reach everyone, everywhere (and at all times) during IYA.
3. Unify the programs via their diverse approaches: star hunts (GaN), star patterns (HMS), and star counts (GWWSC).
4. (Guenther's preference:) Elucidate to the public the concepts of radiance and illumination or astronomical sky brightness and lighting level or star bright and star light, if you will.
5. Find ways to combine the data sets for the public to have communal access. Perhaps use a content management system like a wiki style interface (?)
6. Create a unifying graphic on the DSA website for the three programs that link to the individual programs.

A discussion still needs to take place with staff at the Great World Wide Star Count program. A telecon with Pedro Russo is tentatively scheduled for September 8 to discuss these ways of unifying the programs.

Seeing what countries are interested in participating in Earth Hour

France, Ireland and Hungary have plans to participate in Earth Hour this coming year. Belgium, Germany and Poland have plans to participate in a "Lights Out" type event during IYA.

What the plans were for dark skies events/activities in the different countries during IYA

The table above supplies the plans different countries are carrying out in terms of dark skies events and activities during IYA.

What countries would be participating in DSA-related events/activities during IYA

As a result of the meeting, Connie talked with representatives from several countries interested in GLOBE at Night and in taking SQM measurements. Those countries include: Austria, Belgium, Croatia, the Czech Republic, Germany, Hungary, Ireland, Poland, and Slovenia. Also, 3 countries will be participating in Earth Hour (as discussed), 1 more country in Quiet Skies, a few in dark sky reserves, 3 interested in the planetarium program, a couple of countries in the digital photography contest and the traveling exhibit, 1 country in participating in the "365 Days" podcast and at least 1 country in the "Astronomy Nights in the National Parks". Connie would like to follow-up with these countries before committing them.

Discuss the Starlight Reserve document from Cipriano Marin

A short discussion took place, which is being extended by email.

V. WHAT ARE THE FUTURE PLANS

Connie will be placing a lot of the information contained here on both Dark Skies websites. The next Darksky European Symposium is taking place in Ireland September 17-21, 2009.