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In partnership with :



Press kit - La nuit est belle - July 2019

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- A.1 **Communiqué of July 17, 2019**
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Verbatim

Pascal MOESCHLER, Curator of the Natural History Museum of Geneva and Director of the Bat Centre CCO.

« Ecological transitions look to us to design fresh visions, to imagine new worlds and to do new things. By embracing the ambitious concept of the beauty of the night, Greater Geneva surprises us with its energy, daring, openness and creativity. May this event, the most important and first of its kind in Europe and on our little blue planet, be a festive occasion and a moving one for all of us : together! »

Eric ACHKAR, President of the Geneva Astronomy Society.

« When we look at the stars, we reconnect with our cosmic roots. In fact, all the atoms which make up living things and earth were made in the stars. When the stars died they spewed out their atoms in huge explosions which finally came together allowing the emergence of life. That could be why we feel such emotion when we look at the starry sky. September 26 will be a unique opportunity to admire this amazing night landscape which is an intrinsic part of our identity and our world heritage, from our own home. »

1. Origin of the project

The event « La nuit est belle » is the brain-child of Eric Achkar, President of the Geneva Astronomy Society (SAG) and Pascal Moeschler, Curator of the Natural History Museum of Geneva and director of the Bat Centre (Centre de coordination suisse pour l'étude et la protection des chauves-souris CCO/KOF). In collaboration with Aurore Candau of the Maison du Salève, these two scientists have been regularly involved over many years with the protection of the night sky in the Geneva area : giving scientific conferences on awareness of light pollution, organising events for turning off lights at night in local towns, attending scientific and technical meetings with elected government officials.

During the Assises européennes de la transition énergétique (European Assises for Energy Transition), organised by Greater Geneva in January 2018, they came up with the idea of a festive and novel event which would reach out to the whole population and enhance the territory of Greater Geneva far beyond its borders : turn off public lighting over the transborder area for a whole night and give everybody the opportunity to discover/rediscovers the stars of the Milky Way, weather permitting. While other events in Europe and round the world propose turning out the light on monuments or in communes, this idea would allow a large area inhabited by one million people in over 209 communes to have access to a starry sky and dark nightscapes, such as it has been seen from earth during billions of years.

The theme of the night and light pollution fits very naturally both in the historical origins of Greater Geneva and its present and future objectives. The first transborder collaborations began in the 1980s with an environmental problem : the transborder management of the waterbed in the Genevois area (France). Today, one of the main objectives is to encompass and energise transborder public politics linked to urbanisation, transport, and the environment in this territory which is one of the most dynamic in Europe. These subjects and that to be looked at (light pollution) are at the crossroads of enumerable issues which know no borders: the present biodiversity crisis, access to a starry sky and nightscape values, human health, economy, public finances, ecological transition and climate change, culture.

Things speeded up in the beginning of 2019. The date September 26th, 2019, was fixed due to its astronomical criteria : to maximise the visibility of the Milky Way after sunset. It will be vertical, crossing the whole sky which emphasises its splendour tenfold. Saturn, the ringed planet, will be present and can be viewed through telescopes over the territory, and a new moon (invisible) to not dazzle the stars. Jupiter, the largest planet in the solar system and its Galilean moons will also be visible.

Today, more than a hundred communes in Greater Geneva on both sides of the French/Swiss border (even more are coming) take part in NOT turning on public lighting on the evening of September 26.

« La nuit est belle » has become a solid adventure with all its possibilities. How many communes will show willing on September 26, 2019? The organisers of the event of September 2019 have a secret dream. If all goes well and the public are enthusiastic, why not make « La nuit est belle » into a cultural and popular annual or biennial event, in the same way that the famous lakeside firework display or the Antigal festival have become a fixture.



2. Why turn the lights off ?

The aim of the project is to alert the public to the impacts of light pollution caused by excessive artificial lighting. It changes the day/night cycle causing a negative impact on the biological rhythms of flora and fauna by damaging their natural habitat, not forgetting the risks on human health and the superfluous consumption of energy.

Zooming in on the four main reasons for diminishing light pollution*:

To see the stars

The first people to denounce light pollution were astronomers in the 1970s who could not see the stars and carry out their research. They brought to the attention of public authorities the increase in the sources of artificial lighting and their effects on the starry sky. It was during the Grenelle de l'environnement in France in 2009 that the public authorities took the question of obtrusive light seriously and from 2013 the expression light pollution started to be used by the Ministry of Ecology, durable development and energy in France (Ministère de l'écologie, du développement durable et de l'énergie).

To save energy

Today more and more communes are turning off their public lighting to reduce their energy bill. Studies by the Agence française de l'Environnement et de la Maîtrise de l'Énergie (ADEME) reveal that public lighting represents 18% of the energy consumption of communes, i.e. 37% of their electrical bill. The Agency considers that a 40% saving on the public lighting bill could be made by adapting the installations in use at present.

To preserve human health

Intrusive light, meaning the penetration of an exterior source of artificial light (street lamps, luminous advertising ...) into the living space, is bad for our organism and our health. Sleeping problems can be caused by the constant presence of light which reduces the production of melatonin in our bodies. Melatonin is a hormone vital for our good health produced by the pineal gland in our brain during the night when it is dark and which regulates our circadian rhythm (24 hour biological rhythm).

To protect night biodiversity

Many species are affected by excess lighting in towns which creates ecological traps and barriers for the biodiversity: loss of sense of direction in the case of animals and birds, fragmentation of their habitat, modification of the prey-predator balance, degradation of their natural habitat, migration perturbed. Artificial lighting also has an impact on flora, delaying the fall of leaves, creating an inadequate photosynthesis, upsetting germination and preventing the night pollination of plants by moths and other animals/insects.

**Source : Pollution lumineuse et idées reçues : 10 réponses pour s'éclairer sur le sujet Livret pédagogique réalisé par l'association Agir pour l'Environnement destiné à informer et sensibiliser sur les causes et conséquences liées à l'éclairage artificiel.*

3. A territory already supportive of reducing light pollution

The territory of Greater Geneva comprises today more than a hundred communes which support a plan to deal with light pollution : total or partial lights off over the year in the commune, reduction of light intensity, discussion on removing unnecessary lighting within the framework of renovating public lighting. In parallel, various actions prove the goodwill and awareness of Greater Geneva about light pollution: aerial photos of the canton by night (2013), an exhibition « night corridors » « Les couloirs de la nuit » on the transborder Champagne-Genevois corridors (2015) focussing attention on the importance of the night during the OFF of the Assises européennes de la transition énergétique in 2018. (European Assises for Energy Transition), exhibition « La nuit est belle » at Natural History Museum of Geneva (2018-2019).

1. Why turn the light off every night ?

Isabelle HENNIQUAU, mayor of Sauverny.

« Our village of Sauverny, with its population of 1,000 inhabitants in the border (France/Switzerland) commune of le Pays de Gex, is committed at its level to energy transition. We have had in-depth discussions before cutting public lighting, raised questions about security with the help of our local police, adapted the cuts to village activity. Consequently the street lights have been turned off every night for the last two years, except Fridays and Saturdays since the Night Bus (Noctambus) runs on those nights. If we don't oppose respect for the environment, including flora and fauna as well as human activity, all of us will find our place in a protected world of nature. »



Xavier PIN, maire d'Archamps.

« Because of our conviction that public lighting at night has a bad effect on our environment and our quality of life, a first attempt at turning off lighting was made in our village on March 31, 2017, with astronomic observation to enhance the benefits of total obscurity. More than 90 people were able to appreciate the magnificent spectacle of the dark sky – at last we could see the stars! Since January 24, 2018, we have cut public lighting from midnight to 5 a.m. In one year, we have saved more than 9,000 Euros on our electricity bill, covering the investment needed for the extinction. Comments from inhabitants are 99 positive and many have come to congratulate us on this initiative. »

Jean-Luc SOULAT, mayor of Lucinges.

« A lot is made of the devastation by pesticides and other agrochemicals but lighting is also very harmful to biodiversity. There were some unhappy customers but far more came to congratulate us. »



2. Local people supportive of switching off public lighting for an evening!

Valleiry, September 14, 2018



« This event was organised following the conference in June and attracted more than 200 people. They were thrilled to discover through a telescope the craters of the moon, the rings of Saturn, planets Mars and Jupiter as well as the wealth of stars in the night sky. »

VALLEIRY INFOS, Bulletin municipal – December 2018

Bernex, March 30, 2019



Extracts from comments on social media :

« Oh yes, let's do it again, thank you ! » ;

« Definitely to do regularly, such as turn off the lighting at every new moon. » ;

« We should do it more often! » ;

« Excellent initiative Bernex. We look forward to the next time. » ;

« Thank you Bernex for the beautiful starry evening! »

3. What about safety ?

According to figures available from the Observatoire national de la délinquance et des ripostes pénales (ONDRP), some 80% of theft and aggression take place in broad daylight. Turning off the lighting does not encourage burglaries since a burglar needs light to see where he is.

As for road safety, it has been proved that today in a non-illuminated zone, drivers drive more slowly and carefully. Accidents are less frequent and above all less serious. Other means of road lighting such as reflectors on the sides of the road have proved to be efficient.

Gabriel DOUBLET, mayor of Saint-Cergues.

« In my commune of Saint-Cergues, we have already made the test. And if some people are a little nervous, I can reassure them: turning off the public lighting rather dissuades delinquency and road accidents at least in rural areas, as is confirmed by the police. »



4. Technically speaking

It would consist of **NOT turning on the public lighting for one night**. The electrical installations which command public lighting do not allow for a coordinated extinction at a specific moment in an area the size of Greater Geneva, which is also transborder. According to its facilities, the commune chooses to turn off part or all of its public lighting.

5. Bibliography to know more

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- Trop d'éclairage nuit – FRAPNA : <https://www.jourdelanuit.fr/IMG/pdf/2013LivrPollLum-27-08.pdf>
- Pollution lumineuse et idées reçues - Agir pour l'environnement : <https://www.jourdelanuit.fr/2017/livret-pollution-lumineuse.pdf>

Suisse

- Société d'astronomie de Genève - Page dédiée à la pollution lumineuse : http://www.astro-ge.net/?page_id=2513
- Société d'astronomie de Genève - Dossier complet sur le ciel étoilé du 26 au 27 septembre 2019 à destination de la presse, du public et des communes : http://www.astro-ge.net/?page_id=2946
- Secrétariat du Grand Conseil de Genève - Motion M2422-A « *Pour un éclairage nocturne économe* » adoptée les députés du Canton de Genève : <http://ge.ch/grandconseil/data/texte/M02422A.pdf>
- Secrétariat du Grand Conseil de Genève - Réponse du Conseil d'Etat à la question QUE1067-A « *La nuit est-elle belle aussi dans le canton de Genève ?* » : <http://ge.ch/grandconseil/data/texte/QUE01067A.pdf>



6. Contacts

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