General

The Rhön UNESCO Biosphere Reserve was designated as an IDA Dark Sky Reserve on August, 7th 2014 on the basis of the IDA DARK-SKY PARK PROGRAMM (Version 1.31). The reserve spreads over the three federal states Bavaria, Hesse and Thuringia and five county districts with in total about 225 000 inhabitants on 220 000 km². It is situated in the center of Germany and surrounded by cities and development arias. The applicant, the ARGE Rhön, which is a cooperation of the heads of the five county districts and the three Biosphere Reserve administrations, is the institution in charge concerning all matters of the Dark Sky Reserve Rhön (Sternenpark Rhön).

Contacts

DIRECTOR / ARGE Rhön
c/o Landratsamt Bad Kissingen
Chairman District Chief Executive Landrat Thomas Bold
Obere Marktstraße 6 97688 Bad Kissingen
ARGE-Manager Jürgen Metz
Tel. +49 971-801 5160
E-Mail: juergen.metz@kg.de

Management "IDA Internationaler Sternenpark im Biosphärenreservat Rhön"
c/o Landkreis Fulda
Sabine Frank, Management
Wörthstraße 15, 36037 Fulda
Telefon: +49 661 6006 1659
E-Mail: info@sternenpark-rhoen.de
www.biosphaerenreservat-rhoen.de/sternenpark www.sternenpark-rhoen.de
Facebook: https://www.facebook.com/sternenpark.rhoen?fref=ts
Twitter: Sternenpark Rhön

Non-profit support association:
Verein Sternenpark Rhön e.V. www.verein-sternenpark-rhoen.de
Chairman: Jens Müller

UNESCO Biosphärenreservat Rhön

www.biosphaerenreservat-rhoen.de/sternenpark

Bavarian Administrative Office
Oberwaldebrunner Str. 4, 97656 Oberelsbach
Telefon +49 9774 - 910260
E-Mail: info@nbr-rhoen.de

Hesse Administrative Office
Groenhoff-Haus, Wasserkuppe 8, 36129 Gersfeld
Telefon: +49 6654 96120
E-Mail: vwst@brrhoen.de

Thuringia Administrative Office
Goethestr. 1, 36452 Zella/Rhön
Telefon: +49 36964 93510
E-Mail: propsteizella@web.de
Summary

Last year, the establishment and further development of the Sternenpark and the protection of the night were at the forefront: The Sternenpark and dark skies matters have been defined as a major cross-cutting theme in the new framework concept of the UNESCO Rhön Biosphere Reserve and are therefore more binding for all administrations. In addition, the regional LEADER-managers (see page 15) of the five districts comprising the Sternenpark have agreed to jointly develop the Sternenpark further. This includes the erection of information boards in the municipalities as well as the construction of so-called "sky watch places" at various prominent locations in the Rhön.

Good summer weather has led to an exceptionally strong demand for star tours.

Another highlight was the meeting of the energy suppliers acting within the reserve in spring. The energy suppliers are next to the municipalities the most important partners in the field of public lighting. The meeting served the exchange and the deepening of the cooperation.

Two other municipalities (Eichenzell and Bastheim) have adopted the IDA DSR lighting guidelines and many others have been informed about the usefulness and practicability of the lighting guidelines at information events. A programme of the German Federal Government, which defines the reduction of light pollution as one of its main objectives, is encouraging municipalities to get into more nightfriendly lighting.

The coordination of the Rhön Dark Sky Reserve in its entirety across three national and five district boundaries continues to be a challenging task in which the differences in organizational structures and administrative requirements must be given special consideration. This is the greatest challenge in overall terms. One goal is therefore to establish a better structure by establishing a permanent and responsible contact person in each district administration. This is also, because the district administrations play a decisive role in the implementation of the lighting guidelines as the recognition of the IDA DSR lighting guidelines by the municipalities does not trigger any direct legal consequences. With this in mind, a legal opinion is currently being drawn up by a legal expert within the administration of the district of Fulda. Aim is to show the existing legal possibilities with regard to light pollution. This report will be a basis for the future work and will - after completion - also be made available to all other dark sky places.

In this context, the close cooperation with the city of Fulda, which in turn has applied for recognition as a Dark Sky Community, is very important and fruitful. Unlike public lighting, private and commercial lighting is more difficult for local authorities to regulate. The lighting policy of the city of Fulda is therefore a very big milestone, as it facilitates upper limits. The municipalities in the Dark Sky Reserve are to be encouraged to enact their own friendly lighting policies with upper limits for the amount of light for private and business applications.

The topic of night protection is now an integral part of the a newly established round table on biodiversity at the district of Fulda.

In this respect and due to the ambitions of the German government to reduce light pollution, workload as being a best-practice-region is higher than ever.
Visitors to the Sternenpark

Is it not yet possible to statistically record where the visitors of the Dark Sky Reserve come from. The conversations with the participants as well as the registration data suggest, however, that the dark sky reserve and its offers are known nationwide and therefore many people from far away find their way to the Rhön because of the starry sky. It is our claim that the tours are affordable for as many people as possible. Participation in the public guided tours therefore costs only € 5 per person and the group price is a flat rate of € 75. Especially in terms of tourism, the Dark Sky Reserve is a big win for the whole of the region.

Educational Material for the Star Guides

Night tours in the Sternenpark Rhön are becoming more and more popular.

Not only tourists, but also many locals, school classes, holiday leisure groups and clubs are interested in the starry sky and the night as a living environment. The eleven certified and active star guides have an important role to play in terms of knowledge transfer. In order to be able to explain the goals and tasks of the Star Park - a sustainable and responsible use of artificial light - even more clearly, they have now been equipped with new environmental education materials.

The material consists of ten laminated, illustrated foils in A3 format, which visually represent various aspects around the topic "protection of the night". This is not only about the preservation of the Rhön night landscapes but especially about the serious effects of light pollution on the diversity of species. The educational material also shows how exemplary some local authorities have already changed their lighting and shows good lighting options for private and commercial lighting. After all, Rhönmer and visitors to the Rhön should also take home inspiration about a sensitive handling of artificial light at night.
Some impressions of the educational material:

"Der Tag-Nacht-Rhythmus ist der grundlegendste Rhythmus des Lebens."

Zitat: Prof. Dr. Beatle Jessel, Präsidentin Bundesamtes für Naturschutz

Lichthöhe sky: bis max. 128.000 lx
Lichthöhe bei hohen stehenden Wellen: 6.3 lx
Lichthöhe natürlich dunkel: 6.3 lx

Nach dieser Lichtstärke hat sich das Leben entwickelt – das tagaktive und das nachaktive.

"Die Nacht ist notwendig:

- Betrachtung des Sternhimmels
  - altes Kulturgerät
  - Kunst und Literatur
  - Wissenschaft und Neugier
  - faszinierendes Naturerlebnis

- Biodiversität
  - Ruhe-/Aktivitätsphasen tag-/nachtaktive Tiere
  - Orientierung Vögel, Insekten, Fledermäuse
  - Fortpflanzung, Brutverhalten

- Gesundheit
  - zirkadianer Rhythmus
  - Ruhephase
  - Produktion Hormon Melatonin

Schutz der Nacht

- Natur- und Artenschutz
- Landschaftsschutz
- Energieeffizienz
- Bewahrung Örtlichkeit
- Gesundheit, Tourismus
- Faszination Sternenhimmel
- Lebensqualität
Lighting

Due to government subsidies, many municipalities switched their lighting to LEDs in the past year. Some of the them converted the whole village, other municipalities street wise or wherever needed. It is pleasing to note that local authorities outside the Sternenpark Rhön that have not adopted the lighting guidelines are also converting according to our recommendations; meaning cct 3000 K and full cut-off. In terms of light amount, all municipalities reduce during the night. It seems that the protection of the night now plays an important role for the municipalities, at least in the area of public lighting, and the energy suppliers also advise the municipalities accordingly.

However, the sheer size of the Dark Sky Reserve, which covers three states and five counties with more than 220 000 km², and the currently low personnel capacity make it impossible to accurately capture the changes in lighting.

Here some impressions of new street lighting:

Village of Bastheim, high street. Bastheim adopted the lighting policy in 2017 – after having converted all streetlamps to full cut-off 3000 K with switch-offs and reduction in the night.

Village of Stetten, Hauptstraße 1/20tel: As in many Bavarian communities in the Rhön, the people of Stetten also wanted to hold on to the specially forged light housings named “Fuchs-Leuchten”. Therefore, flat LED modules with 3000 K were installed in the luminaire roofs with the effect that the colour temperature is very pleasant and scattered light is now largely avoided.
Village of Sondheim: Very impressive was the view on the community Sondheim after the conversion to full cut-off 3000 K. From a hill, one looks at the village and has seen almost no direct light sources. The hotel in the background as well as the church are clearly visible and turn out to be the biggest polluters. At the beginning of September, a consultation meeting took place with the parish. They are willing to improve the church lighting according to our suggestions.

Best practice - conversion of the village of Silges, Nüsttal

The village of Silges, which is a part of the municipality of Nüsttal, stands out clearly. The citizens of Silges have been committed for years to better protection of insects through numerous measures. It was clear to the citizens that a special protection of the night was also necessary. Since no state subsidies were available, the village community financed the new lighting itself with other subsidies, donations and a subsidy from the community.

https://silges.de/aktuelles/silges-summt/
The result is impressive as these before-after pictures clearly show. The new lighting was inaugurated with a ceremony. There were also lectures by the villagers, a biologist on the subject of nocturnal animals and the energy supplier. The event ended with a guided stargazing tour on a hill above the village overlooking it.

Data provided by the Energy Suppliers

The data provided by RhönEnergie Fulda clearly show that only 3000K luminaires have been installed for approx. 3 years. There is definitely a shift in their data from 4000 K to 3000 K in 2015. It is also pleasing that municipalities such as Petersberg and Nüsttal installed amber-LED (cct 2000 K) on a broad basis and numerous municipalities such as Fulda, Rasdorf and Poppenhausen use amber-LED in the transition zone to the natural environment.

Here some excerpts from the data list provided by the RhönEnergie Fulda for the municipalities of Dipperz and Petersberg. Both municipalities have adopted the lighting guidelines.

Dipperz:
As already described last year, it can be stated that public lighting is gradually meeting the requirements of the LMP. At the same time, however, it can also be observed that both private advertising lighting and private lighting are on the increase – especially as many municipalities have designated new industrial estates. Against the background that the Rhön is centrally located in Germany, there are currently many commercial developments ongoing. Even if the municipalities refer to the lighting guidelines, the information does not always arrive in time or is being ignored. Since the adoption of the LMP does not trigger any legal consequences itself, we see it as our task here to engage in more direct discussions with local authorities in the future. There have been very constructive discussions on this subject in recent months with the mayors in those municipalities with the biggest industrial estates.

Here, too, the community of Petersberg sets a good example. Citizens are regularly being informed about light pollution. The first announcement in the official gazette marked the beginning of this process. In addition, at the end of October 2018 there will be initial information for businesses and they will be asked to accept a consultation offer on optimizing lighting in terms of reducing light pollution.
Also, the municipalities are supposed to hand out this information leaflet for home owners and builders:

New territory / New Sternenpark Municipalities

Within the last 12 months two more municipalities adopted the LMP:

Bastheim in the Bavarian part within the UNESCO Biosphere Rhön: A municipality with about 2000 inhabitants and 7 districts. Bastheim has converted all public lighting to full cut off 3000 K LED-luminaires prior to the adoption of the LMP.

Eichenzell: Eichenzell, one of the largest municipalities in the district of Fulda, has adopted the lighting guidelines in April 2018. Eichenzell has 11,000 inhabitants and is a prosperous community with a large industrial area. The decision was preceded by comprehensive information of the municipal and local councils.
The municipalities of Eichenzell and of Petersberg have a strong interest in issuing a legally binding lighting policy - based on the lighting policy of the city of Fulda.

In addition, information evenings on ecological lighting were held on two different dates in August for the municipal councils and mayors of the municipalities in the south-western part of the district of Fulda. It was a joint event of the RhönEnergie Fulda, the Landkreis Fulda and the Sternenpark Rhön. All municipalities follow the guidelines of the Sternepark in the area of public lighting.

Development of the Dark Sky Reserve Rhön

Map at the time of application 2014  
Map Summer 2018

The important role of the City of Fulda

With the application of the city of Fulda as IDA Dark Sky Community and the associated enactment of a legally binding light statute, a very strong impulse will go far beyond the borders of the Rhön. The lighting statutes of the city of Fulda are to be used to develop models for lighting design statutes for the smaller municipalities. It seems to be legally the only way to really restrain private and commercial lighting.
Sky Quality

Measurements with handhelds are being continued:

Regularly at Hofbieber Danzwiesen:
https://www.google.de/maps/place/Bubenbader+Str.+6,+36145+Hofbieber/@50.54672,9.9038228,19z/data=!3m1!4b1!4m5!3m4!1s0x47a33ed7830a13e9:0x3c5c9cd9612a5442f8m2!3d50.54672!4d9.90437

Longitude: 9°54'23"
Latitude: 50°32'48"
Height: 720 m

<table>
<thead>
<tr>
<th>Datum</th>
<th>MEZ</th>
<th>mag/arcsec</th>
<th>Wetter</th>
<th>Sonstige Beobachtungen z.B. untypische Beleuchtung Rtg. Rhön</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.01.18</td>
<td>21:00:00</td>
<td>21.04</td>
<td>ohne Mond</td>
<td></td>
</tr>
<tr>
<td>14.01.18</td>
<td>22:00:00</td>
<td>21.30</td>
<td>Wolkenlos, -7°</td>
<td></td>
</tr>
<tr>
<td>21.01.18</td>
<td>22:30:00</td>
<td>20.81</td>
<td>hazy</td>
<td>Liftbeleuchtung Waku</td>
</tr>
<tr>
<td>08.02.18</td>
<td>23:00:00</td>
<td>21.53</td>
<td>snow</td>
<td></td>
</tr>
<tr>
<td>09.02.18</td>
<td>21:00:00</td>
<td>21.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.02.18</td>
<td>22:30:00</td>
<td>21.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.02.18</td>
<td>21:00:00</td>
<td>20.91</td>
<td></td>
<td>Liftbeleuchtung Waku</td>
</tr>
<tr>
<td>06.04.18</td>
<td>23:00:00</td>
<td>21.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07.04.18</td>
<td>24:00:00</td>
<td>21.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08.04.18</td>
<td>24:00:00</td>
<td>21.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.04.18</td>
<td>00:00:00</td>
<td>21.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>04.05.18</td>
<td>23:30:00</td>
<td>21.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05.05.18</td>
<td>00:30:00</td>
<td>21.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.05.18</td>
<td>23:30:00</td>
<td>21.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.05.18</td>
<td>02:00:00</td>
<td>21.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>05.10.18</td>
<td>23:00:00</td>
<td>21.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06.10.18</td>
<td>23:30:00</td>
<td>21.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.10.18</td>
<td>00:30:00</td>
<td>21.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.10.18</td>
<td>23:00:00</td>
<td>21.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.10.18</td>
<td>23:30:00</td>
<td>21.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.10.18</td>
<td>23:00:00</td>
<td>21.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.10.18</td>
<td>22:30:00</td>
<td>21.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.10.18</td>
<td>03:30:00</td>
<td>21.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Further Measurements

<table>
<thead>
<tr>
<th>Datum</th>
<th>MEZ</th>
<th>Ort</th>
<th>Länge</th>
<th>Breite</th>
<th>mag</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-10-13</td>
<td>22:50</td>
<td>Oberhalb Unterweid</td>
<td>10.078527</td>
<td>50.609412</td>
<td>21.06</td>
<td>Milkyway</td>
</tr>
<tr>
<td>2018-10-13</td>
<td>23:10</td>
<td>Nüsterrasen</td>
<td>9.962635</td>
<td>50.616356</td>
<td>21.06</td>
<td>Milkyway</td>
</tr>
</tbody>
</table>
Automatic measurements

At the Fulda University of Applied Sciences, Department of Electrical Engineering, a project to set up an automatic network has been running for some time. The first sensors are installed on the roof of the department and the data can be retrieved here:

https://himmelsmonitoring.et.hs-fulda.de/

In addition, some final papers were written for implementation. The work of Geroen Reus was publicly introduced at the international Geoinformatik Conference in Salzburg, Austria.

In order to obtain better possibilities and results for monitoring the sky background brightness, funds were applied for an all-sky camera equipment in October 2018. It is not yet clear whether these funds will be granted.

Conservation and Research

In addition to the measuring network project of the University of Applied Sciences Fulda, another research project with the working title "Species protection through better lighting" is currently underway. Project partners are the Environmental Centre of the City of Fulda, the Leibniz Institute for Water Ecology and the Sternenpark Rhön. The project outline is currently being examined by the Federal Agency for Nature Conservation. It is to be expected that the funds will be approved.

Next to that, several bachelor theses were written on dark sky matters and many expert interviews took place.

Marie Witzel's bachelor thesis, which examined the sustainable development of tourism in protected areas and focused on the Sternenpark Rhön, stands out in particular. In particular, she described the obstacles and hurdles for the development of Sternenparks - e.g. an increase in light pollution or weak structures and too few man power.
Funding

Funding is still provided mainly by the Hesse Part of the UNESCO Biosphere Reserve. The ARGE Rhön finances 20 hrs/week manpower, the borough of Fulda another 19,5 hrs/week. Also, the borough of Fulda finances office, printing information material, travel costs, car etc.

As described in the introduction, there has been an agreement on further development at transnational level. The focus is on raising awareness among citizens and visitors and on making it easier for lay people to observe the sky. Starting in 2019, the so-called sky watch places are to be set up at various locations in the Rhön, which will provide information boards on nighttime protection and facilitate orientation in the night sky with star maps, celestial pole finders, etc. Since very extensive means are necessary for this, one agreed on the use of LEADER means. LEADER is a programme of measures of the European Union, with which innovative projects in rural areas have been promoted as models since 1991. Local action groups work on the grassroot and develop concepts. At this stage of the project, four local action groups in Hesse and Thuringia are involved and work closely together. The procedure is very extensive and complicated, as every region has a different organizational structure and procedure in gaining the funds. This has required many appointments so far. However, all of which will lead to a consolidation on the topic of night protection across the different actors.

Sketch of planned information boards and sky view place:
Lunar Eclipse

As in the whole of Germany, from an astronomical point of view the total lunar eclipse on 27.07.2018 with Mars close to Earth was of course the highlight of the year. The association Sternenpark Rhön e.V. organized an event on the Wasserkuppe, Hessen's highest mountain. The flying sports centre provided its premises and the adjoining restaurant offered themed food, including a wide selection of vegan dishes. Also, since Neil Armstrong, a fan of gliding, once visited the Wasserkuppe (note: the Wasserkuppe is considered the cradle of gliding), there is a small permanent exhibition on the moon landing in the flying sports centre, which was of course of special importance in the evening of the lunar eclipse. In addition to the offered star tours, a band (piano and singing) played, observations with the telescope were on offer and a Limerick competition took place. The Bavarian state television followed the entire course of the lunar eclipse with a live stream as well as the Hessian radio station FFH. Members of the association were available for astronomical interviews. Not to be counted for was the high number of visitors of more than 800 plus further approx. 2000 people on the extensive area of the Wasserkuppe.
For a further deepening of the identification of the inhabitants within the Sternenpark, the most important cultural event was the main cultural day of the Rhönklub. The voluntary association Rhönklub e. V. is a cross-national heritage and hiking association in Bavaria, Hesse and Thuringia based in Fulda. With around 26,000 members in 88 branch associations, it is one of the largest German hiking clubs in the Association of German Mountain and Hiking Clubs.

Once a year the Rhönklub organizes a main cultural day for all its members. In 2018 this day was dedicated to the Dark Sky Reserve and night protection as a means of seeing the sky as a valuable heritage in the region. The programme included an introductory lecture on the effects of light pollution and the fields of action of the IDA Dark Sky Reserve. This was followed by a lecture by a biologist on nocturnal animals and a documentation of pictures of the Rhön night landscape by the 1st chairman of the Sternenpark Rhön e.V. association, Jens Müller.

This event gave rise to the idea of reporting regularly on the protection of the night in the future in the club newspaper. This is a milestone for our work, because the club newspaper of the Rhönklub reaches many people, who are sensitive to our issues and quite often in decisive positions.

**Outreach (Selection)**

**Starguiding Tours and Astronomical Events**

A weather-wise fantastic summer as we rarely experience in our latitudes has led to a massive increase in interested parties and participants of our star tours. Not only were all of our public guided tours fully booked and some of them doubly booked, but also the demand for private guided tours, which are handled by the Sternenpark Verein, has risen strongly.

Participants of the public tours (the yellow number notes the amount of events).
Participants of private tours (the yellow number notes the amount of events).

The 2019 annual programme has been extended and will be published shortly. Due to the good weather conditions, the demand for our astronomical observation platform on the Hohe Geba was also very high this year.

Workshop “Save the Night”

Two more workshops “Save the Night” for children were held. One on the Wasserkuppe and another on in Fulda-Museum. As there is no environmental education in the German-speaking area especially about light pollution, we have applied for your Reiff sponsorship Award for Astronomy 2018 with our self-developed workshop. If we win the prize, the money will be used to develop a representative guide to the workshop, which will then be made available to other star parks, environmental associations, etc.

Workshop “Teleskope guide”

In February 2018, under the guidance of Carolin Liefke from the Haus der Astronomie, Heidelberg, a teacher training course on the use of telescopes took place at the Rhöniversum Environmental Education Centre in Oberelsbach. Since the event was well attended, it will be repeated in January 2019.

https://oberelsbach.rhoeniversum.de/home/veranstaltungen/event/42-lehrerfortbildung-der-fernrohrf%C3%BChlerschein
In autumn 2017, the energy supplier RhönEnergie Fulda proposed the joint publication of an exclusive calendar showing both the beauty of the night and its threats. The creation of the calendar was a joint effort of RhönEnergie and the Sternenpark Rhön e.V. association and was exclusively handed out RhönEnergie's managing directors for customers and selected actors such as the mayors in the supply area.

In spring 2018, the Hessian Ministry of the Environment was the first German ministry in Germany to produce a brochure for sustainable industrial and commercial lighting with the participation of Sternenpark-Koordination. The brochure was written by Dr. Andreas Hänel and Dr. Mathias Schmidt, who are both members of the Verein Sternenpark Rhön e.V.

Link to the brochure:

Based on this brochure, the Biosphere Reserve developed new handouts for various lighting needs (conversion public light, sport facilities, commercial, private and garden, churches and monuments) and made them available on the website etc. In particular, the handout for commercial enterprises with suggested upper limits is sent directly to entrepreneurs and has already been published by some municipalities.

https://biosphaerenreservat-roheon.de/broschueren?qcategory%5B%5D=9&qsearch=
Monthly Sky Preview

Our monthly sky preview including the announcements of upcoming event is becoming more and more popular and is now also printed supra-regionally. The sky preview is being composed by Roland Müller of our Verein Sternenpark Rhön e.V.


Exhibition

Until September 2018, the exhibition “Loss of the Night” of the Forschungsverbund Leibniz was on show in the Visitor and Information Centre of the Biosphere Reserve in Wildflecken-Oberbach.

Eath Hour 2018

With the participation of Sternenpark Rhön, the city of Fulda participated for the first time in the WWF project Earth Hour. This date was also used to inform the public about the efforts of the city of Fulda for the recognition as a Dark Sky Community. In addition to switching off the illumination of famous monuments of the city such as the cathedral, two guided tours were offered: An astronomical tour on the topic of the seasons and another tour with Mr. Hahner on the topic of ecological city lighting.


Bavarian Ministry on Environment

The Bavarian Ministry of the Environment refers to the Rhön as a best-practice region when it comes to protecting the night.

Information speeches (selection):

- Energy saving week Fulda
- Rotary Club Fulda
- NABU Fulda (a branch of one of Germany's biggest nature conservation organization)
- NABU Burghaun
- Rhönklub (main cultural day)
- Rhönklub Fladungen (branch)
- Friends of Nature
- Trade association of Hofbieber
- Information talk on ecological home and garden lighting for citizens of Burkardroth, Bad Brückenau and Wildflecken-Oberbach
- Information talk for the nature and landscape guides in the Thuringian and Bavarian part of the Rhön
- Information talk on ecological lighting together with the energy provider RhönEnergie Fulda for the municipal councils of Neuhof, Flieden, Hosenfeld, Großenlüder and Bad Salzschlirf
  ...

Outside the regional backdrop:

- Environmental Centre Bensheim, South-Hessia
- BUND Heidelberg (a branch of one of Germany's biggest nature conservation organization)
  Hessian Association for the Protection of Birds and Nature
- Environmental congress Linz, Austria
- Participation Stars for All in Milan, Italy
- Dark Sky Symposium Capria, Italy
- Environmental advisory board of the Main-Kinzig-Kreis
- guiding several small nature conservation organizations

Community and Media Relations (Selection)

Also in the past year much was reported about the Sternenpark. Increasingly also about the topic light pollution. There were several radio and TV-features throughout the year.

Here is a selection:

The secretary of state for the environment of Thuringia visited the Dark Sky Reserve and enjoyed a star guiding tour.

The powerful Catholic church newspaper reports in detail about the protection of the night:

http://www.kirchenzeitung.de/content/lichtverschmutzung
TV-Report on Dörrensolz:
https://www.mdr.de/thueringen/sued-thueringen/video-172770_zc-c90e080e_zs-0d7c2c89.html

TV-Feature MDR Sagenhaft
https://www.mdr.de/tv/programm/sendung76072.html

TV-Feature Bayerischer Rundfunk – Sendung Unkraut (Christmas lights)
https://www.br.de/mediathek/video/lichtverschmutzung-oeko-suende-weihnachtsbeleuchtung-trotz-led-av:5a38026aa3e9510018c767a0

TV-Feature Bayerischer Rundfunk “Kämpfernatur”
https://www.br.de/mediathek/video/video-kampfernaturen-die-schuetzerin-der-nacht-av:5b76e7d9557980018c765a0

Big Radio-Feature with live interview

Print:
https://www.mainpost.de/regional/rhoengrabfeld/Mond-Erdmond;art777,9880042
https://www.treffpunkt-kommune.de/mass-halten-tut-not-bei-der-beleuchtung/
https://www.thueringer-allgemeine.de/web/zgt/leben/detail/-/specific/Nachtschichtwegen-Nachtlicht-1134591189
http://www.fnp.de/rhein-main/Dauerlicht-ist-fAuer-Umwelt-der-helle-Wahnsinn;art801,2876834
https://www.geo.de/reisen/18245-rtkl-deutschland-die-roen-laedt-das-ganze-jahr-zum-entdecken-ein
http://www.faz.net/aktuell/rhein-main/lichtverschmutzung-fuer-eine-nachhaltigere-beleuchtung-15508176.html
https://m.mainpost.de/regional/rhoengrabfeld/Umweltministerien-Umweltauswirkungen;art765,9932742
https://www.mainpost.de/regional/bad-kissingen/zu-viel-licht-erhellt-die-nacht;art433641,9941255

This report was compost by Sabine Frank, coordinator of the IDA Dark Sky Reserve Rhön.

If there are any questions, please contact:

Management "IDA Internationaler Sternenpark im Biosphärenreservat Rhön"
c/o Landkreis Fulda
Sabine Frank, Management
Wörthstraße 15, 36037 Fulda
Telefon: +49 661 6006 1659
sabine.frank@landkreis-fulda.de