



First annual report to the IDA  
from IDA acceptance (17-07-2015) to present day (30-08-2016), following  
suggested guideline information fields.

## **GENERAL.**

Current contact details for the EVIDSP.

Les & Kris Fry. Primary astronomy event organisers for the EVIDSP.

Email contact [les.starzend@gmail.com](mailto:les.starzend@gmail.com) or through the Elan Valley Visitor Centre, Rhayader, Powys. LD6 5HP. Tel 01597 810880

Alternative contacts are -

Ed Parsons – Area Lands Manager for Dwr Cymru.

Contact via EV Visitor Centre

Alec Baker – Elan Valley Trust. Contact on 01597 810449

There are no current plans to apply for an upgrade to our Silver tier status since this would require facilities and financial commitment that is not apparent at this time. Our light meter readings, detailed later, further indicate no reason for upgrade requirements. The total number of site visitors to the Elan Valley Visitor Centre is in the order of 150,000, of whom 1,300 + directly attended “Launch day” and other organised events listed later in this report.

## **LIGHTING.**

Contact with Emma Bradford – Powys Council Local Environment – has confirmed no alteration to the Council lighting within the Elan Village, so this remains as per our application.

There were no new lighting projects completed within report time frame, and with reference to our LMP policy statements and commitments and the EV

lighting inventory on P75 of our application, the following has changed.

Property ID No 11 – Lighting redirected downwards on both units – now compliant.

This gives current lighting inventory figures of-

172 total light units, with 153 now being compliant.

Resulting in an 88.95% compliant total.

I am informed by the Elan Valley Trust that a programme of works to rectify the pre identified, non compliant units, is proposed to be actioned during the autumn/winter of this year.

## SKY QUALITY.

In line with LMP policy #7, we have continued monitoring at the existing 13 pre identified sites around the EVIDSP. The acquisition format remains as stated in our original application and the results are itemised below.

| Site 1 05-09-2015 |       | 06-05-2016                 |       |
|-------------------|-------|----------------------------|-------|
|                   | 21.62 |                            | 22.15 |
|                   | 21.66 |                            | 22.44 |
|                   | 21.72 |                            | 22.36 |
|                   | 21.81 |                            | 22.36 |
|                   | 21.79 |                            | 22.18 |
| Average           | 21.72 |                            | 22.30 |
| SITE Average      | 22.01 | SITE Average (application) | 21.88 |
| NELM              | 6.63  | +/- application NELM       | +0.06 |

| Site 2 05-09-2015 |       | 06-05-2016                 |       |
|-------------------|-------|----------------------------|-------|
|                   | 21.55 |                            | 22.17 |
|                   | 21.61 |                            | 22.21 |
|                   | 21.61 |                            | 22.29 |
|                   | 21.59 |                            | 22.33 |
|                   | 21.63 |                            | 22.25 |
| Average           | 21.60 |                            | 22.25 |
| SITE Average      | 21.92 | SITE Average (application) | 21.91 |
| NELM              | 6.59  | +/- application NELM       | +0.01 |

| Site 3       | 05-09-2015 |                            | 06-05-2016 |
|--------------|------------|----------------------------|------------|
|              | 21.66      |                            | 22.39      |
|              | 21.61      |                            | 22.44      |
|              | 21.58      |                            | 22.42      |
|              | 21.64      |                            | 22.48      |
|              | 21.51      |                            | 22.44      |
| Average      | 21.60      |                            | 22.43      |
| SITE Average | 22.02      | SITE Average (application) | 21.97      |
| NELM         | 6.63       | +/- application NELM       | +0.02      |

| Site 4       | 05-09-2015 |                            | 06-05-2016  |
|--------------|------------|----------------------------|-------------|
|              | 21.64      |                            | 21.71       |
|              | 21.69      |                            | 21.73       |
|              | 21.69      |                            | 21.71       |
|              | 21.65      |                            | 21.70       |
|              | 21.70      |                            | 21.70       |
| Average      | 21.67      |                            | 21.71       |
| SITE Average | 21.69      | SITE Average (application) | 21.70       |
| NELM         | 6.48       | +/- application NELM       | zero change |

| Site 5       | 05-09-2015 |                            | 06-05-2016  |
|--------------|------------|----------------------------|-------------|
|              | 21.69      |                            | 22.00       |
|              | 21.69      |                            | 21.99       |
|              | 21.73      |                            | 22.02       |
|              | 21.68      |                            | 22.02       |
|              | 21.70      |                            | 22.01       |
| Average      | 21.70      |                            | 22.01       |
| SITE Average | 21.85      | SITE Average (application) | 21.86       |
| NELM         | 6.56       | +/- application NELM       | zero change |

| Site 6       | 12-10-2015 |                            | 10-02-2016  |
|--------------|------------|----------------------------|-------------|
|              | 21.72      |                            | 21.75       |
|              | 21.72      |                            | 21.73       |
|              | 21.74      |                            | 21.73       |
|              | 21.77      |                            | 21.77       |
|              | 21.71      |                            | 21.73       |
| Average      | 21.73      |                            | 21.74       |
| SITE Average | 21.74      | SITE Average (application) | 21.75       |
| NELM         | 6.50       | +/- application NELM       | zero change |

|              |            |                            |            |
|--------------|------------|----------------------------|------------|
| Site 7       | 12-10-2015 |                            | 10-02-2016 |
|              | 21.57      |                            | 21.63      |
|              | 21.59      |                            | 21.61      |
|              | 21.69      |                            | 21.69      |
|              | 21.66      |                            | 21.71      |
|              | 21.61      |                            | 21.70      |
| Average      | 21.62      |                            | 21.67      |
| SITE Average | 21.65      | SITE Average (application) | 21.54      |
| NELM         | 6.46       | +/- application NELM       | +0.05      |

|              |            |                            |             |
|--------------|------------|----------------------------|-------------|
| Site 8       | 12-10-2015 |                            | 10-02-2016  |
|              | 21.71      |                            | 22.08       |
|              | 21.74      |                            | 22.12       |
|              | 21.79      |                            | 22.12       |
|              | 21.79      |                            | 22.08       |
|              | 21.80      |                            | 22.08       |
| Average      | 21.77      |                            | 22.10       |
| SITE Average | 21.93      | SITE Average (application) | 21.93       |
| NELM         | 6.59       | +/- application NELM       | zero change |

|              |            |                            |             |
|--------------|------------|----------------------------|-------------|
| Site 9       | 12-10-2015 |                            | 10-02-2016  |
|              | 21.68      |                            | 22.00       |
|              | 21.69      |                            | 21.99       |
|              | 21.69      |                            | 22.03       |
|              | 21.74      |                            | 22.00       |
|              | 21.77      |                            | 22.01       |
| Average      | 21.71      |                            | 22.00       |
| SITE Average | 21.86      | SITE Average (application) | 21.85       |
| NELM         | 6.56       | +/- application NELM       | zero change |

|              |            |                            |            |
|--------------|------------|----------------------------|------------|
| Site 10      | 12-10-2015 |                            | 10-02-2016 |
|              | 21.41      |                            | 21.68      |
|              | 21.42      |                            | 21.72      |
|              | 21.49      |                            | 21.76      |
|              | 21.55      |                            | 21.70      |
|              | 21.55      |                            | 21.67      |
| Average      | 21.48      |                            | 21.71      |
| SITE Average | 21.60      | SITE Average (application) | 21.57      |
| NELM         | 6.44       | +/- application NELM       | +0.02      |

|              |            |                            |             |
|--------------|------------|----------------------------|-------------|
| Site 11      | 12-10-2015 |                            | 10-02-2016  |
|              | 21.74      |                            | 22.05       |
|              | 21.69      |                            | 22.06       |
|              | 21.70      |                            | 22.01       |
|              | 21.70      |                            | 22.06       |
|              | 21.71      |                            | 22.05       |
| Average      | 21.71      |                            | 22.05       |
| SITE Average | 21.88      | SITE Average (application) | 21.87       |
| NELM         | 6.57       | +/- application NELM       | zero change |

|              |            |                            |            |
|--------------|------------|----------------------------|------------|
| Site 12      | 05-09-2015 |                            | 06-05-2016 |
|              | 21.66      |                            | 21.66      |
|              | 21.63      |                            | 21.66      |
|              | 21.64      |                            | 21.66      |
|              | 21.64      |                            | 21.68      |
|              | 21.66      |                            | 21.66      |
| Average      | 21.65      |                            | 21.66      |
| SITE Average | 21.66      | SITE Average (application) | 21.55      |
| NELM         | 6.46       | +/- application NELM       | +0.05      |

|              |            |                            |       |
|--------------|------------|----------------------------|-------|
| Site 13      | 31-07-2016 |                            |       |
|              | 21.69      |                            |       |
|              | 21.70      |                            |       |
|              | 21.66      |                            |       |
|              | 21.68      |                            |       |
|              | 21.70      |                            |       |
| Average      | 21.69      |                            |       |
| SITE Average | 21.69      | SITE Average (application) | 21.67 |
| NELM         | 6.48       | +/- application NELM       | +0.01 |

**SITE average** figures vary from 21.48 to 22.43,  
equating to NELM's of **6.37 to 6.81**

*For comparison, application figures varied from 21.28 to 22.44,  
equating to NELM's of 6.27 to 6.81*

**ESTATE average** SQM figure =21.85,  
equating to **ESTATE average** NELM of **6.555**

*For comparison, application Estate average SQM figure = 21.744,  
equating to Estate average NELM of 6.505*

These figures show a very small improvement in the EVIDSP average NELM of 0.05, a figure I would consider of no major significance, showing instead, that the EVIDSP is maintaining it's quality of sky.

In relation to a permanently mounted SQM reader, there are no indications of that prospect being considered at this time.

## **CONSERVATION AND RESEARCH.**

There are no conservation or research projects directly related to dark skies, although Aberystwyth University / IBERS -(Institute of Biological, Environmental & Rural Sciences) - currently run PhD studentship courses in nature and habitat conservation involving study on the Elan Valley Estate.

## **FUNDING.**

No grant funding in being directly administered in the direction of the Dark Skies programme. We have personally attained a small "honorarium" purely to cover our own costs in transport and event production for the EVIDSP, this coming jointly from the EV Trust and Dwr Cymru Welsh Water.

Heritage Lottery Funding of some £1.8 Million has been recently achieved by the Estate however, and is being directed in the manner below, the following information being taken directly from the Elan Valley's own web site at [www.elanvalley.org.uk/about/elan-links](http://www.elanvalley.org.uk/about/elan-links)

A group of like-minded came together to explore the ideas that were being put forward to enhance the experience visitors would have when they came to Elan alongside protecting the natural and built heritage in a way that could also be beneficial to the local economy.

It naturally followed that an application could be submitted to the Heritage Lottery Fund Landscape Partnership Scheme. The partnership was successful in ring-fencing a significant sum of £1.8million towards a £3.3million project that includes habitat management; restoration of some of the buildings on the estate; contemporary collecting of photographs and people's stories; arts projects; and volunteering and learning projects.

The project includes 27 projects, which are designed to

- Safeguard Elan's natural heritage
- Develop engaging and innovative ways of narrating Elan's heritage to a wider audience
- Improve the sustainability of Elan's traditional high nature value farming
- Attract more visitors to enjoy the wild and varied landscape
- Make the area more accessible

- Provide opportunities for learning at lots of different levels
- Ensure that key built and ancient heritage sites are protected
- Record Elan diverse cultural heritage in imaginative ways

Read about the projects by clicking below:

| No. Project |  |                   |
|-------------|--|-------------------|
| 1           | Restoring Habitats                             | <a href="#">?</a> |
| 2           | Habitat Management                             | <a href="#">?</a> |
| 3           | Traditional Farming Systems                    | <a href="#">?</a> |
| 4           | Protecting Heritage Sites                      | <a href="#">?</a> |
| 5           | Access to Heritage                             | <a href="#">?</a> |
| 6           | Recording Heritage                             | <a href="#">?</a> |
| 7           | Innovative Engagement                          | <a href="#">?</a> |
| 8           | Increasing Interaction                         | <a href="#">?</a> |
| 9           | Improving Recreation                           | <a href="#">?</a> |
| 10          | Outreach                                       | <a href="#">?</a> |
| 11          | Understanding the Importance of Sustainability | <a href="#">?</a> |
| 12          | Legacy   | <a href="#">?</a> |

Future grant submission would depend on support from the Heritage Lottery Fund, and I am currently unaware of possible future plans in relation to this aspect.

## ARTS & CULTURE.

The Estate was visited in Sept 2014 – prior to application acceptance – by Dawns Powys Dance, a community and educational dance company, and dance development agency from the rural heart of Wales as inspiration for their forthcoming dance project “*under dark skies*”.

“Powys Dance has been a part of the cultural fabric of the Powys arts scene for 35 years. Working across age ranges, social backgrounds and abilities we hope to inspire more people to enjoy participating in dance. We are a community and education-based dance company and dance development agency who believes that dance is an exciting and accessible art form that inspires creativity and joy, stimulates learning and has deep rooted health benefits that extend beyond fitness into holistic well being”.



A couple of their comments following an evenings walk and discussion with us are featured below -



*After an eventful and inspiring weekend up at the Elan Valley with our Under Dark Skies participants, we are mainly spending the morning sorting through the hundreds of photo's that were taken and discussing how beautifully the project unfolded whilst on location![#underdarkskies](https://www.facebook.com/EVastronomy)*

**Dawns Powys Dance** And if anyone fancies 'walking the solar system' which is how we spent our Saturday evening (it was great!) then visit the Elan Valley Astronomy page <https://www.facebook.com/EVastronomy> for more details

## OUTREACH.

Since IDA acceptance in July 2015, the following events have been staged. At all of these we have been personally present and take the opportunity to discuss with attendees the work of the IDA, the Elan Valley's own IDA status, what that means for Humans, Wildlife and Flora & Fauna in general and what simple, practical and money saving changes can be made to home owners lights.

August 2015

Kids "pop bottle" rocket day. Approx 30 children and adults constructed and launched safe water and air powered rockets. "Vehicle Assembly Building" showing full production. Parents seemed to have as much fun as their children did, in the construction and flight of their rockets.



Some of the stunning designs and one of the "Low Earth Orbital" launches.



"Meteor and meteorite" talk including samples to handle at Elan Valley Visitor Centre followed by Perseid meteor watch. 10 attendees.

September

"Galaxy walk" at EVVC – 19 attendees.



“Solar System walk” for Ystrad Meurig Community Group. 18 attendees.

October

“IDA Launch Day event” A day long series of talks and displays for all astronomical tastes. 250+ attendees.



December

“Telescope surgery” talk followed by Geminid meteor watch. 22 attendees.

March 2016

Cambrian Tourism Network meeting at EVVC.

Attended with display material to set out the opportunities that now exist for promoting Mid Wales as a base for Astro tourism. 50+ attendees.



April

International Dark Skies Week – Display all week.

Planetarium from Aberystwyth University with evening observation session with a range of telescopes at EVVC. 80+ attendees



May

Mercury transit - public viewing event at EVVC. 50+ attendees.



June

"International Solar Sunday" public viewing event at EVVC, also featuring Aberystwyth University's Planetarium and Pete Williamson's Solar talks 100+ attendees.





## August

Attended “SolarSphere”, a music and astronomy festival. 3 day/night event. IDA and EVIDSP stand manned and lead “Solar System” and “Galaxy” walks on multiple days.

350+ attendees at event.



Children’s “pop bottle rockets” day. Another fun filled day of design, construction and launch into “Low Earth Orbit”. 35 “family” launches and attendees.



Attended Elan Valley Show, with IDA and EVIDSP display stands, along with White light and H alpha telescopes to show attending public safe Solar viewing.- Sun had some spectacular prominences that day! 300+ attendees.



## COMMUNITY AND MEDIA RELATIONS.

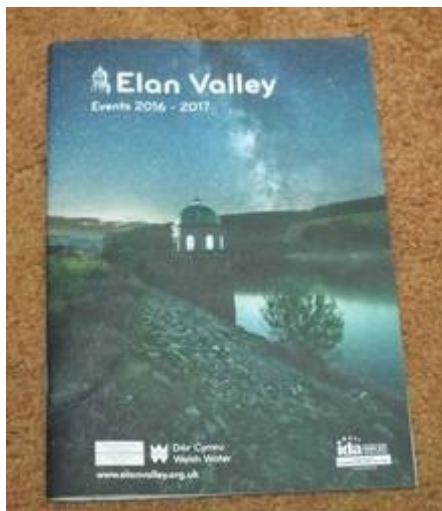
Just prior to Launch Day, a TV interview took place on the Elan Valley, featuring our impending event with the feature appearing on the National News programme the day of our “Launch Day” event.



The Elan Valley Trust and Dwr Cymru Welsh Water continue to update their own web pages at [www.elanvalley.org.uk/](http://www.elanvalley.org.uk/) and are becoming more visible through facebook at - [www.facebook.com/ElanValley](https://www.facebook.com/ElanValley)



40,000 bi-lingual events booklets were distributed, promoting EVIDSP along with 8,000 'bedroom browsers' raising awareness and encouraging visits.



We heavily promote the astronomy events on the EVIDSP and astronomy in general for Mid Wales with our own facebook page at [www.facebook.com/EVastronomy/](https://www.facebook.com/EVastronomy/) reaching around 7,800 people worldwide per month, as well as linking into and sharing with Wales Online, MidWales MyWay, Cambrian Tourism Network, What's on in and around Ceredigion, What's on in Mid Wales and Discover your Wales to mention but a few.

We continue our excellent relationship with Powys Council on lighting matters and they are as ever, supportive to our aims.

We are further delighted to have Aberystwyth University becoming more involved in our events programme and look forward to continue our fruitful relationship with them.

We also note that Dark Sky Wales [www.darkskywales.org/](http://www.darkskywales.org/) have started to feature the EVIDSP in some of their astronomy programmes, further advertising our presence here in the heart of Wales.

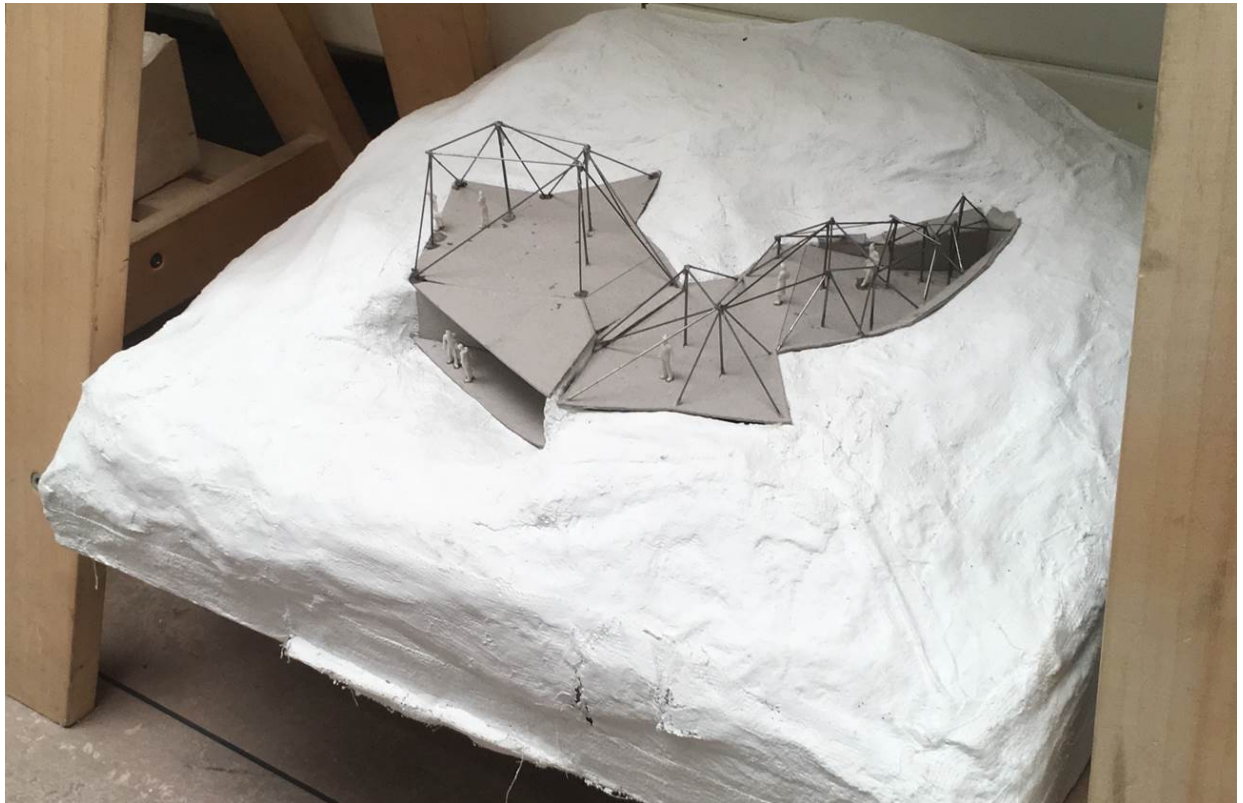
# Welsh School of Architecture.

First year project completed and exhibited at WSA during June 2016, following a site visit to Claerwen in January 2016.

94 students explored 'the reciprocity between the interior of an architecture built to withstand elemental forces on earth and the flatness of deep space in the night sky' and 'students were invited to make a building proposition that in some way registers astronomical conditions'. Discussions ongoing for expanded programme with WSA in 2017.







Report compiled by Les & Kris Fry.

for and on behalf of

**THE ELAN VALLEY INTERNATIONAL DARK SKY PARK**

