Yorkshire Dales Sky Quality Survey 2018-19 Dark Sky Meter Guidance

Thank you for borrowing this dark sky meter from The Yorkshire Dales National Park Authority. There are written instructions on how to operate the meter within the meter box. Hopefully, everything should be fairly straightforward but here is some guidance we've put together on how to take the best readings.

- The sky must be dark, clear and the moon absent otherwise it's not a true reading of darkness. Wait until the sky is properly dark, at least a couple of hours after sunset or before sunrise. The "Hours of Darkness" sheet lists the times.
- Between 30 April and end of July the sky is not truly dark because the sun isn't far enough below the horizon during night-time so please don't submit readings over this period.
- Never take measurements directly underneath or near a light source or anything that might block the clear sky.
- Before taking a reading, wait 5 mins for the device to reach outside temperature. Point the unit directly overhead (towards the zenith) and press its sole button. It will beep until a digital reading is displayed. It will take a few seconds (the darker the sky the longer the delay).
- We need you to take **five** readings, one after each other. Record all of them but ignore the highest and lowest and average the middle three to produce a final figure.
- A higher figure means a darker sky and we'd expect readings to be anything between 20.5 and 21.6 in the Dales and Nidderdale. Very high readings i.e. 22.8 can be discarded the device is reliable up to 22.
- The meters are sent out with fully charged batteries but if you are getting many readings over 22, try changing the batteries.
- Complete the record sheet including:
 - A brief description of the location
 - The date and time
 - o The GPS coordinates and/or Grid Reference
 - o The five readings and your average of the middle three
 - The external temperature and a brief description of the weather conditions sky darkness can vary a good deal depending on such things as mist and moisture in the air.

Please arrange for this meter to be returned to Rebecca Greenfield at the YDNPA, Colvend, Hebden Road, Grassington, Skipton, North Yorkshire, BD23 5LB T:0300 456 0030

Please submit your meter readings to David Evans, <u>David.Evans@yorkshiredales.org.uk</u>, who is coordinating the sky quality survey for 2018-19.