

IDA – 2018 Annual Report for UBarU DarkSky Park

UBarU Camp & Retreat Center continues to operate according to the IDA-approved Light Management Plan for Dark Sky Parks which was part of the certification process that was completed in 2015.

Starting in June 2016 a segment on preserving the night skies was added to the curriculum of all sessions of our summer youth camps, which has continued through summer 2017 and the four sessions that ended in July 2018.

Because of this practice of teaching campers about the value of preserving the night skies and utilizing telescopes to augment the wonders that can be seen in truly dark skies, a generous benefactor donated the funds from his endowment to build the UBarU Youth Astronomical Observatory, which was completed and operational on October 15, 2017. This observatory was instrumental in making the dark-sky segments of our 2018 summer camps highly successful and a “favorite” activity chosen by the campers.

We are working with other youth camps in the area to provide access to the observatory for their campers and instruction on the value of preserving the night skies. One such camp, The Science Mill youth camp, is a day camp in Johnson City, TX that has approached us about joint activities for summer 2019. Besides the youth camps UBarU strives to teach by example for all who visit there to experience a facility that practices sustainability with the use of a substantial percentage of renewable energy through solar power, water conservation including rain-water collection, and preserving the night skies by following an IDA certified Light Management Plan for DarkSky Parks.

UBarU is now a popular dark-sky observing location for area amateur astronomers. And since 2016 has been the designated dark-sky site for the San Antonio Astronomical Association (SAAA) for their monthly dark-sky/deep-sky observing and imaging.

Our second UBarU Labor-Day Weekend Star Party was held Aug. 31 – Sept. 3, 2018. This was a full-featured event with star gazing, lectures by professional astronomers, meals, lodging and a BBQ with door-prize drawing for excellent astronomy-related items donated by Celestron, Sky-Watcher, Explore Scientific, Sky & Telescope and others.

Sky quality readings were taken on each of the first two nights of the event using a Unihedron SQM since both nights had mostly clear skies before Moon-rise. The September 1st readings were taken between 10:00 – 10:40pm at and/or near to the observatory area at the northwestern edge of the campus with readings ranging consistently between 21.57 – 21.63 (Moon-rise occurred at approximately midnight). The readings on August 31st were taken between (11:20 - 11:40pm) in the central and eastern edge of the campus with readings

ranging from 21.37 – 20.90 which were affected by Moon-glow more and more throughout the time frame since Moon-rise occurred at 11:37. There was also considerable humidity on both nights, which likely contributed to slightly lower reading that we have recorded during dry-period readings. However all readings remained solidly within the Silver Dark-Sky Park classification. September 2nd was heavily overcast at sundown followed by thunderstorms until well into the next day, so meaningful SQM readings were not possible.

Since there are no other lights anywhere else in the UBarU property outside of the 15-20-acre campus area, we only took readings within that area to show that our Light Management Plan is clearly effective even with the addition of a number of astronomers using scopes (often with dim red-light power sources) throughout the same area. Several of the astronomers commented that the skies at UBarU were “every bit as good as those at the Texas Star Party” which is held annually near Fort Davis, Texas close to the McDonald Observatory, and is the gold standard for these types of events.

Our representatives continue to work with the city leaders of Kerrville, TX (the largest city near UBarU at approximately 15 miles southeast) to implement a city lighting ordinance, and actually made a joint appeal with the Hill Country Alliance to the Kerrville City Council in August 2017. We are making some progress in this matter, and hope to have better news in the 2019 report.

Respectively Submitted,

Dr. Roy Ellzey – UBarU Trustee