



Planetary Nebula Observing Program

*An Observing Program that gives a glimpse
of our distant future*



It is thrilling to contemplate how very connected we are to those late evolved stars at the center of the nebulae. If we are star stuff – it is the planetary nebulae that are most responsible for distributing that stuff.

Within a single object, we see not only the probable future of our own star, but also get a glimpse of how our solar nebula received the enrichment that made Earth and humans possible. It is the cycle of creation demonstrated before our very eyes, and in the very wavelengths those eyes were designed to detect. Diverse, colorful, enigmatic, beautiful, and scientifically important, planetary nebulae are our link to the cosmos.

In the Planetary Nebula Observing Program,

- you will observe and describe the remnants of evolved sun-sized stars,
- you will be treated to some of the sky's most impressive showpieces comprising bright rings, colorful baubles, and delicate butterflies,
- you will also be challenged to detect some faint gossamer wisps of nebulosity that will demand all of your best observational techniques,
- you will gain a better understanding of solar evolution, and
- you will quickly realize that not all planetary nebulae are alike.



NGC 246: Image
courtesy of Dan Crowson



NGC 246 Sketch
courtesy of Cindy Krach

One hundred and ten planetary nebulae were carefully chosen for this Observing Program. Among them are some of the most famous showpieces in the northern sky, but the list also contains examples across the entire range of planetary nebula morphology.

- Minimum aperture – 8 inches, 10 and 12 are better.
- In addition, four "proto-planetary nebulae" have been included as extra challenges.
- The darker the skies, the better.
- O III and UHC filters help enhance faint detail.

As a class, planetary nebulae are the most varied, most colorful, and most enigmatic of celestial objects. You'll find this program to be one of the most challenging, interesting, and surprising programs offered by the Astronomical League!

For complete details, <https://www.astroleague.org/planetary-nebula-observing-program/>