

One Orbit Later

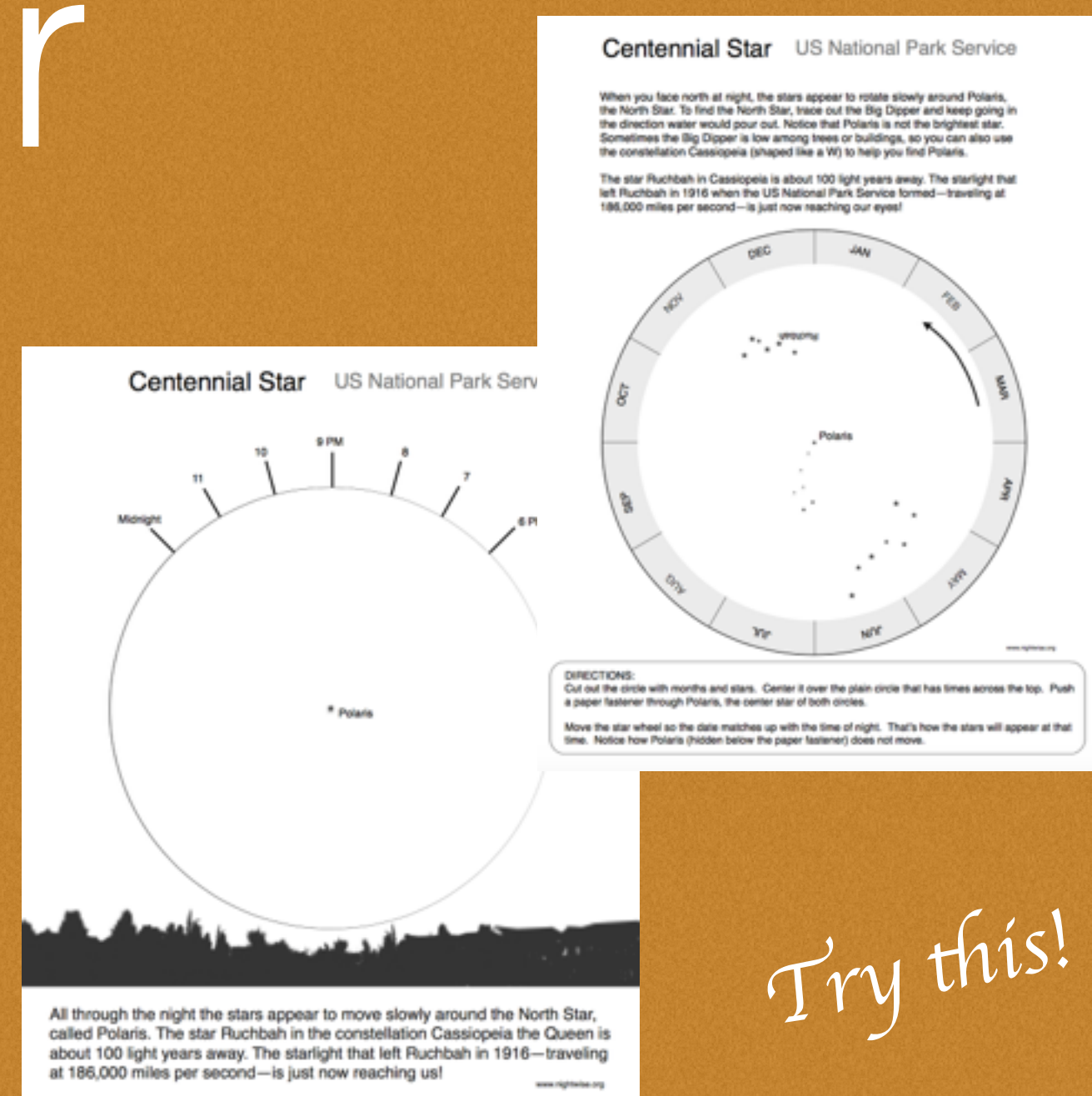


Centennial Star



The star **Ruchbah** in the constellation Cassiopeia is the Centennial Star of the US National Park Service, which is celebrating its 100th birthday in 2016. The starlight that left Ruchbah in 1916 when President Wilson signed the Organic Act is now striking our eyes, for Ruchbah is about 100 light years away.

I think I shared the story with a ranger at every National Park I visited this year (about ten). See nightwise.org/single-post/2015/11/07/Star-of-the-National-Park-Service



Try this!

Solar Eclipse



Taking the word to the street! My 2017 Solar Eclipse page links to key sites I frequent, with **emphasis on eye safety**. See nightwise.org/?draft=true#eclipse-2017/cqj.

Students from Career Academy in South Bend, IN, designed a Sun Funnel (www.nightwise.org/sun-funnel) that you can make with a 3D printer. On their video (<https://youtu.be/5f7UXyQ3j98>) we demonstrate how to use the device to allow a group of people to look at a magnified image of the sun safely.



Image: Career Academy South Bend

Dark Skies



My 2016 dark sky advocacy dovetailed with current events in the community and continued my dialogue with local government officials. I am emphasizing that all light fixtures should be fully shielded and **LEDs should have a CCT of 3000K or less to reduce blue-rich output**.

- Submitted design elements to consider in lighting plan during public input session for Regional Cities Initiative grant awarded, in part, to South Bend, IN. Blog post: [Vision for South Bend Riverfront Parks and Trails](#)
- Measured darkness at two sites at request of city parks department. My appraisal both suggests the value of night itself and summarizes the meter values. Blog post: [Night Values](#)
- Wrote to Indiana Bicentennial Visioning Project, encouraging them to "recognize the best science of the day to mitigate the deleterious effects of light on human health, the environment, and public safety." Blog post: [Lights for Indiana's Bicentennial Vision](#)
- Advocated for inclusion of a star on a proposed city flag design, noting, "The design elements in a flag reflect what we value... Strive to protect the real item that inspired this most honored symbol—that is, the real stars themselves." Blog post: [What Carter Said](#)
- Blanketed multiple offices at the mayor's gathering of municipal departments to insure everyone received a common lighting message which applies directly to diverse municipal functions. Blog post: [Mayor's One-Stop Shopping](#)
- Addressed multiple public meetings at which a city park was considered for development and I suggested they don't know what is at risk of being lost. Later the city parks department requested a night sky assessment and the night sky was deemed one of the assets to be included in future park management. Blog posts: [Improved Park Management Includes Night Sky](#), [Quantifying the Night at Elbel](#), and [At Risk at Elbel Park](#)
- Proposed a "light fast" for Lent and listed 100 ways to give up light. Web page: [Action Ideas](#)



Solargraphs



A society that embraces renewable energy needs to be familiar with and informed about the sun.

To build solar awareness, make simple pinhole cameras to capture long-duration images of the sun. Put a sheet of 5x7 black and white photographic paper inside a 16-ounce can with a pinhole. Mount it outside facing south and retrieve it months later. The resulting solargraph shows the local landscape plus the path of the sun between the solstices. Failure is definitely possible.

The Indiana Bicentennial Commission endorsed the **Anniversary Solargraph** as a Bicentennial Legacy Project. To capture the essence of time, solargraph cans are placed in South Bend area sites such as Studebaker Building 84, The History Museum, Union Station, Four Winds Field, Bendix Woods County Park, and more.

See nightwise.org/single-post/2016/06/21/Time-Starts-on-the-Solstice and blog posts tagged "solargraph."



Bicentennial Star

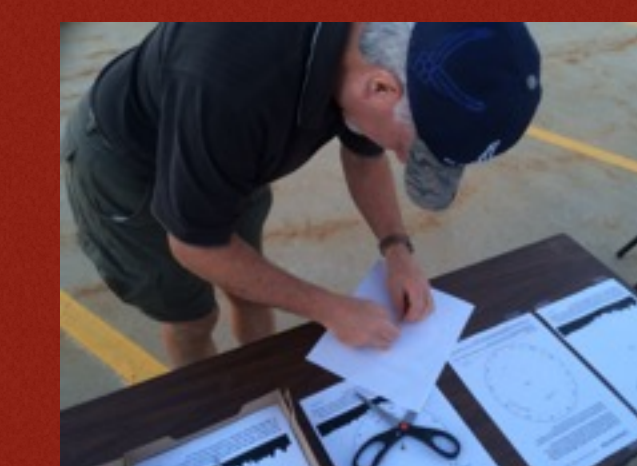


The Indiana Bicentennial Commission endorsed the corner star **Scheat** in the Great Square of Pegasus as the Indiana Bicentennial Star. The starlight that left Scheat in 1816 when Indiana became a state is just now reaching our eyes, for Scheat is approximately 200 light years away.

The illustration is adapted from the Indiana state flag using the stars of Pegasus, with the star Scheat under the state name. See nightwise.org/bicentennial-star.

2016

- Nightwise.org
- Science Alive
- Michiana Star Party 8
- Transit of Mercury
- AstroCamp.us
- Eclipse 2017 AAS Workshop
- Sidewalk Astronomy



Nightwise.org

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