



The Green Bank Observatory is home to the world's largest fully-steerable radio telescope, the Robert C. Byrd Green Bank Telescope (GBT). Astronomers from all over the planet use the GBT to investigate everything from the properties of near-earth asteroids to the environments surrounding super-massive black holes. Breakthrough Listen, the most comprehensive campaign to search for techno-signatures from other civilizations in the Universe is also a regular project on the GBT!

The Green Bank Observatory is also a high-tech village. Skilled engineers, technicians, computer scientists, machinists, and mechanics ensure that the GBT always functions at the top of its capabilities. We cordially invite you to visit, explore the science center and take a tour! Want to go deeper? Try one of our behind-the-scenes tours.

Be a part of our Science!

Making a gift to the observatory supports our daily operation and mission, including our Education and Public Outreach program, which reaches nearly 10,000 students annually. Your donations and memberships can be made in honor of- or in memory of- and are wonderful gifts for any science lover!

To learn more about advancing our mission, visit our website or call 304-456-2011.

greenbankobservatory.org/engage/

Green Bank Observatory
P.O. Box 2
155 Observatory Road
Green Bank, WV 24944



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Twitter @GreenBankObserv



2021

GREEN BANK SCIENCE CENTER



Visit us today!

304-456-2150

greenbankobservatory.org

What to Do!

TAKE A TOUR

We offer a variety of tour options including our popular Site Tour, a History Tour, and the SETI and High Tech Tours (where you can get behind the scenes). You can even take a self-guided walking tour on miles of trails. Thank you for turning your phone or digital devices off.

VISIT THE EXHIBIT HALL

Discover how radio astronomers learn about the Universe. Interactive exhibits and fascinating facts await you inside a huge Faraday cage. Don't know what a Faraday cage is? Ask one of our Science Center Staff or take one of our fascinating tours!

greenbankobservatory.org/visit/



HAVE A BITE

Dine at the Starlight Café

Enjoy a selection of fresh foods and treats at our own award-winning café, serving generous portions at affordable prices!

Take advantage of our special menu and pricing for groups of 20 or more.



greenbankobservatory.org/visit/starlight-cafe/

GIFT SHOP

The Galaxy Gift Shop offers apparel, collectibles, and the best variety of educational toys around! Indulge your inner scientist!

In addition, our machine shop welders, machinists, and artists have created a collection of items made right here on site. Proceeds from sales benefit our education programs and the Green Bank Observatory Machine Shop.



shop.greenbankobservatory.org

greenbankobservatory.org
304-456-2150

CREATE YOUR OWN EVENT

Educational Field Trips

Schedule free tours, activities, and day and overnight field trips for organized groups of K - 16 students and youth clubs. Overnight students experience science first-hand by completing research projects with a real radio telescope. A trip to the Observatory might just inspire your students to join the next generation of scientists and engineers! Registration required.

greenbankobservatory.org/education/field-trips/

Virtual Tours

Take a Virtual Tour of our telescopes, discuss our projects, and learn about our history - all in a virtual tour delivered by our STEM Education Assistant.

See our events calendar for dates.

greenbankobservatory.org/events/

Virtual Visits

Virtual Visits are offered only to educational groups of five or more participants and give an in-depth program on many topics, from our site history to the Virtual Astronomer for a Day program.

greenbankobservatory.org/education/virtual-visits/

We'll come to you!

Request a college ambassador from our West Virginia Science Public Outreach Team (SPOT) to visit your school or group and deliver standards-based presentations and hands-on activities.



Request your virtual visit today!

greenbankobservatory.org/education/outreach/



ORGANIZED GROUP TOURS

Motor coach groups are welcome. Tours can be scheduled any day of the week. Please make advance reservations. A \$3 fee per person is required for motor coach tours. Group meals are available.

School and scout groups are welcome. See our event calendar for Scout Weekend opportunities!

For additional group details and reservations, call (304) 456-2150 or email tours@gboobservatory.org

ABOUT THE OBSERVATORY

The Green Bank Observatory, founded in 1956, is the birthplace of modern radio astronomy, a branch of astronomy that studies the invisible radio waves produced by cosmic objects. Due to the favourable geography, the world's first radio telescope is situated here. Project Ozma, the first modern search for extraterrestrial intelligence, took place here. It was at the Observatory's 140-foot diameter telescope that the first complex organic chemicals were discovered in space.

Today, radio astronomers can detect the remote whispers of the Universe in order to discover answers to our most astounding astronomical questions.

Cover: Molecular clouds entrained in the hot wind from the center of the Milky Way. Illustration: Paul Vosteen (GBO/AUI/NSF)
Exhibit Hall mural (below) created by Science Center tour guide Rebekah Anderson



Plan Your Trip



Call 304-456-2150 or email
tours@gbobservatory.org
for advance reservations and information

PUBLIC SITE TOURS

Offered Year-Round

Adults (ages 11-64) – **\$6/person**
Seniors (65 & up) – **\$5/person**
Children 10 & under – **Free**
Active Service Personnel and Veterans – **Free**

Tour the fascinating world of radio astronomy from the groundbreaking instruments of the 1930s to the world's premier radio telescope, the GBT! This family-friendly tour is our most popular offering!

See our schedule on the back of this brochure or go to our website for tour information.

greenbankobservatory.org/visit

STAR LAB SUNDAYS

Every Sunday, **2 p.m. - 2:45 p.m.** ; **\$5/person**

Family Fun! Crawl into our planetarium balloon for a fascinating night sky tour! Space is limited to 20 participants. Program lasts 45 minutes and reservations are recommended.

HIGH TECH TOURS

Select Thursdays (dates below) **3:30 p.m. - 4:30 p.m.**;

\$15/person; 15 participants max.; no photography of any kind is permitted. Reservations and screening required at least 48 hours in advance. Federal regulations require pre-screening for attendees age 18 and up.*

Look inside receivers and marvel at the precise engineering required to collect the faintest signals from the Universe. An Observatory engineer will pull back the curtain on our site labs and control room as you see what makes our observatory one of the world's leading radio telescope facilities.

High Tech Tour Dates:

1/14, 2/11, 3/11, 4/8, 5/13, 6/10, 7/8, 8/12, 9/9, 10/14, 11/11

*For more on our screening policy visit:
greenbankobservatory.org/visit/screening

HISTORY TOURS

Offered November through April. Available on request and by advanced reservation only. See historical control rooms and other areas of our site not open on our regular tour and learn the history behind the science! Minimum 5 people per tour.

Advance reservations are required. **\$20/person.**



NATURE WALK

Select dates (below). Bring the family for a hike with a resident naturalist on one of our many trails. Experience the environment that makes our Observatory unique. Maximum 12 people per tour, reservations encouraged. **\$5/person.**

Tour Dates: 4/3, 6/19, 10/16; Tours at 10 a.m. and 2 p.m.

SETI TOURS

Select Fridays (dates below); **1 p.m. - 3:30 p.m.** ; **\$40/person**

Due to high demand and limited capacity, advance reservations are strongly suggested. 20 participants max., 4 min.; Ages 12 & up. Light refreshments provided. The tour requires climbing stairs.

Our tour celebrates Green Bank's historic Search for Extra Terrestrial Intelligence (SETI). It begins with an exclusive presentation right in the control room of our 85-I Telescope where the search began with Frank Drake's OZMA project. From there, guests enjoy rare admittance into the 140-foot telescope where Jill Tarter's Project Phoenix took place and then to normally-restricted GBT access points. The tour ends in our Drake Lounge where you will be greeted by one of our own astronomers and learn about the future of SETI and the role of the GBT in the Breakthrough Listen project.

If you've ever wanted to be inside our operation control rooms or to speak to one of our radio astronomers in person, then this is THE opportunity of a lifetime!

Tour dates:

5/28, 6/4, 6/18, 6/25, 7/2, 7/9, 7/16, 7/23, 7/30, 8/6, 8/13, 8/20, 8/27, 9/3, 9/10, 9/17, 9/24



FAMILY SCIENCE LABS

Select Saturdays (dates below); **1 p.m. - 3 p.m.** ; Reservations suggested

Get your family started in science! Kids age 4 - 9 will love our fun-filled, hands-on science projects. We provide all materials. This year, we'll focus on force and motion, ecosystems, weather and climate, and engineering.

Dates: 3/20, 5/22, 8/21, 11/20

SCOUTING TRIPS

Day trips can be scheduled any day of the week. Tour reservations are free for organized scout groups but advance arrangements are required. For overnight stays and badge completions, see the dates below.

Scouts BSA Astronomy Badge Weekend Dates:
1/15 - 17; 2/12 - 14*; 4/9 - 11; 9/10 - 12*;
12/3 - 5

Girl Scout Badge Weekend Dates
(Junior/Senior Scouts): 3/12-14, 5/7-9, 11/5-7

Daisies & Brownies Day Trip Dates available on request

*Scouts BSA Electronics Badge Weekend



STAR PARTIES

Meet at the Science Center - Begins at Sunset. **FREE!**

Green Bank Observatory staff will treat you to views of the night sky through optical telescopes. If it is raining, don't worry, we will have a stellar indoor presentation.

Star Party Dates: 1/16, 2/13, 3/13, 4/10, 5/8, 6/12, 8/14, 9/11, 10/30, 11/6, 12/4



Hours change seasonally.
All activities are subject to cancellation



Special Events

Green Bank Star Quest - The Nation's Largest Optical & Radio Star Party! July 7 - 10, 2021

Enjoy optical and radio astronomy presentations, hands-on workshops, and dark West Virginia skies. Learn to use a radio telescope! Fun activities for children too!

The Green Bank Star Quest is sponsored by the Central Appalachian Astronomy Club.

www.greenbankstarquest.org



Space Race Rumpus Bike Among the Telescopes! June 11 - 13, 2021

Whether you are an experienced mountain biker or complete novice, there are rides, races, and cycling for all ages and levels. Join us for a weekend-long cycling festival with a variety of fun rides. The Rumpus also features bonfires, on-site camping, and live music!

Early registration discounts!

spaceracerumpus.org



Green Bank Open House & Family Science Day October 10, 2021, 1 - 4 p.m.

Where else can you build and launch a rocket, test your engineering skills, do fun science experiments, and see some of the biggest telescopes in the whole world ALL IN ONE DAY? Public site tours are available as well as rare peeks into the control room of the world's largest fully-steerable telescope!

Free event! No reservations required. Rockets and tour tickets available while supplies last.



FEATURED EVENTS

All Featured and Upcoming Events - greenbankobservatory.org/events

Drake Lectureship, 2021

The Frank Drake Lectureship is awarded each year to a member of the sciences, arts, or humanities community in recognition of their contributions to advancing human knowledge and creativity.

Dr. Frank Drake, the Lectureship's namesake, has had a long and distinguished career that began at the Observatory in Green Bank. In 1960, using a radio telescope at Green Bank, Dr. Drake made the first modern search for radio signals from extraterrestrial civilizations, creating an area of scientific research that continues to engage creative minds today.

Garth Newel Emerging Artist Fellow Showcase, August 5, 2021

Music comes to the Observatory from the Garth Newel Music Center in Warm Springs, VA, and the Emerging Artist Fellowship Program. We are honored to have such highly-talented and skilled musicians play for us in the Science Center Auditorium. This is a free event for our community sponsored by the Green Bank Recreation Board.

Turkey Trot, November 27, 2021

Burn off the Thanksgiving feast at the 13th annual Turkey Trot hosted by the Green Bank Observatory. Race in a traditional 5K run/walk, a 10K trail run, or the 1K Gobble Wobble for kids 8 and under. While you race, you have a great view of our telescopes including the GBT!

Races begin at 1:00 (Gobble Wobble), 1:10 (10K), and 1:15 p.m. (5K Run/Walk). All races start and finish at the Science Center.

greenbankobservatory.org/green-bank-turkey-trot/

Proceeds of the Turkey Trot support the Pocahontas County High School track team and the William Dille Scholarship.



Visit the Green Bank Telescope

Green Bank Observatory

Hours of Operation

November 1 – May 28

Open Thur - Mon, 10 a.m. - 6 p.m.

Closed Tue - Wed

Tours at 11 a.m., 1 p.m. and 3 p.m.

May 29 – Sept 6

Open Daily; 8:30 a.m. - 7 p.m.

Tours Hourly 9 a.m. - 6 p.m.

September 7 - October 31

Open Thur - Mon, 8:30 a.m. - 7 p.m.

Closed Tue - Wed

Tours Hourly 9 a.m. - 6 p.m.

Closed Dates:

4/4 for Easter Holiday

11/23-11/26 for Thanksgiving Holiday

12/21-12/25 for Christmas Holiday

12/28-12/31 for New Year's Holiday

Starlight Café Hours:

October 1 - May 28, 11 a.m. - 6 p.m.

May 29 - September 30, 11 a.m. - 7 p.m.

Admission to the Science Center and Exhibit Hall are FREE!

Public Tour Rates

Adults (Ages 11-64) \$6.00

Seniors (65 & Up) \$5.00

Children (10 & Under) Free

Veterans & Active Service Members Free

GBO Members get special rates

Ask about becoming a member today!

HOURS SUBJECT TO CHANGE

Please check our social media for updates

Facebook Instagram Pinterest @GreenBankObservatory

Twitter @GreenBankObserv



The GREEN BANK OBSERVATORY is supported by the National Science Foundation and is operated by Associated Universities, Inc. Any opinions, findings and conclusions or recommendations expressed in this material do not necessarily reflect the views of the National Science Foundation.

Getting Here is Easy!

Only 40 minutes to Snowshoe; 15 minutes to Cass!



Welcome to the Quiet Zone!

The Green Bank Observatory Science Center is at the heart of the National Radio Quiet Zone, a 13,000 square mile region of minimized radio signal interference designated by the U.S. Government in 1958 to create a safe haven for radio astronomy.

Thank you for placing your phone in airplane mode when you arrive and turning it off completely, along with all other electronic devices, while touring the Observatory and grounds.

You can bring a film camera or purchase a disposable camera in our Gift Shop to capture your experiences at the Green Bank Observatory.

greenbankobservatory.org/about/national-radio-quiet-zone/

Green Bank Observatory
155 Observatory Road, Green Bank, WV 24944