

# Green Ridge State Forest



## Driving Tour

*(44 miles, approximately 3 hours)*



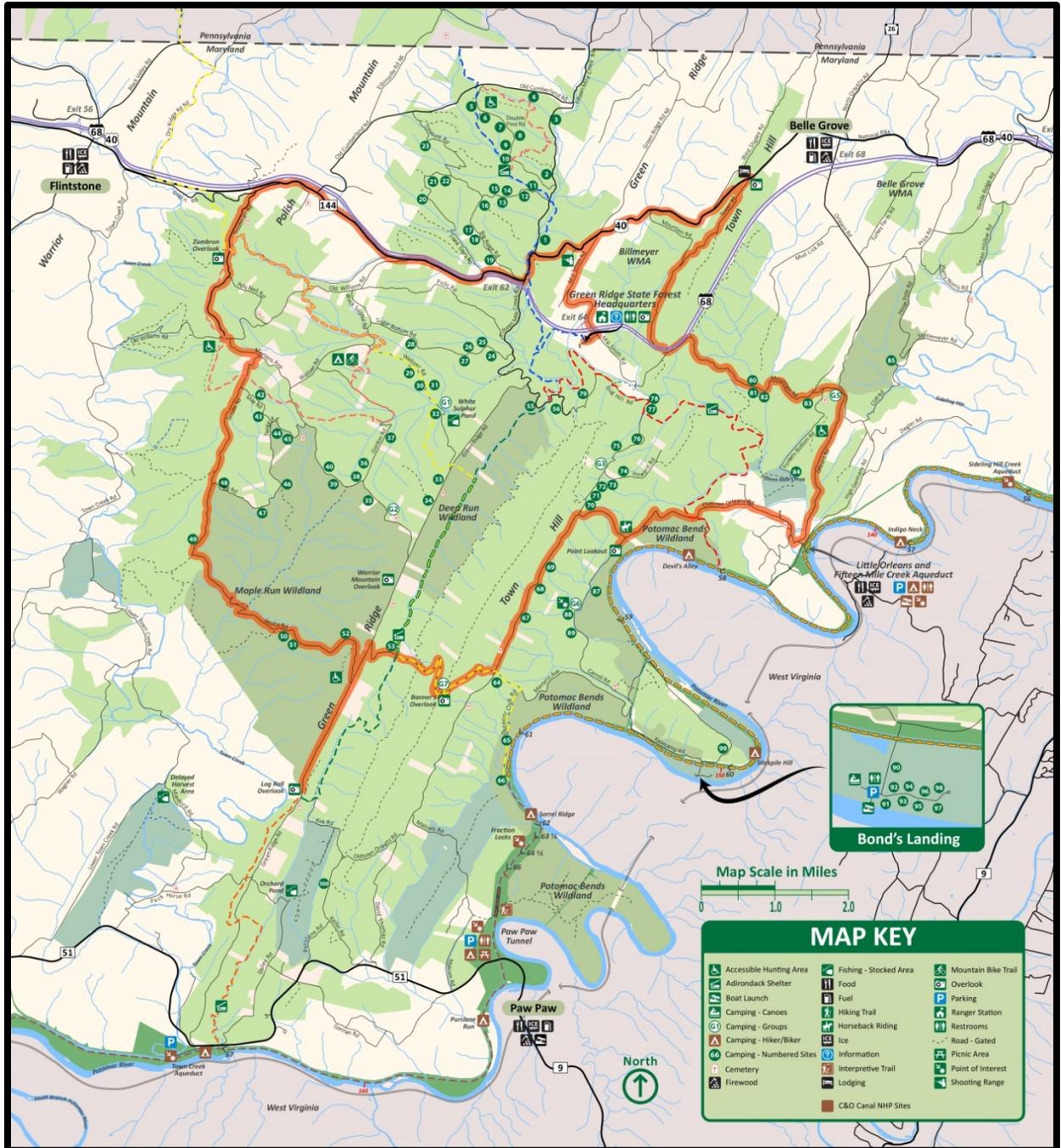
*Department Photo*

This driving tour begins and ends at the forest headquarters and is approximately 44 miles. We recommend that you bring a picnic lunch with you, as it will take approximately three hours to complete the tour. For added enjoyment, you may want to bring binoculars, cameras, GPS units, and field guides.

At 47,560 acres, Green Ridge State Forest (Green Ridge) is the largest adjoining block of public land in Maryland. Green Ridge is located within the Ridge and Valley Province of the Appalachian Mountains. It is rich in both natural and cultural heritage and remains a "working forest," as it is managed by the Maryland Department of Natural Resources Forest Service to conserve the natural ecological processes, while supporting the economy of the region through an active forest management program. The Maryland Forest Service mission is to restore, manage, and protect Maryland's trees, forests, and forested ecosystems to sustain our natural resources and connect people to the land.

The Maryland Forest Service invites you to take this opportunity to become better acquainted with your state forest and the benefits it offers. This self-guided tour is designed so you can enjoy the beauty of Green Ridge and learn about the forest's management and its many assets. Narratives within this tour focus on the autumn setting, but we believe you will find your state forest offers beauty and splendor each time you visit, no matter the season.

We hope you enjoy your tour through Green Ridge. Please feel free to contact us if we can be of further assistance. Have a safe and wonderful adventure!



Additional Visitor Guide and maps are available at the forest headquarters.

To begin the driving tour, leave forest headquarters and pull up to the stop sign at the end of Forest Court. Once at the stop sign, reset your trip odometer to match the mileage (*below*):

### **00.0 Turn left onto MV Smith Road**

Most of Green Ridge is made up of second growth, even-aged mixed oak forests. Other forest types include mixed hardwood, bottomland hardwood, Virginia pine, and mixed pine forests. In general, these mature forests are approximately 100–120 years old, as they evolved naturally after the forest exploitation that occurred across the landscape prior to public ownership.



Much of today's Green Ridge State Forest was owned by the Mertens family of Cumberland, Maryland between 1870 and 1920. They came to the area to build boats for the canal—today's Chesapeake & Ohio Canal National Historical Park (C&O Canal). After the timber was harvested on their land, the Mertens' cleared and burned thousands of acres of forest in order to plant apple trees. They hoped to make it the "largest orchard in the world." However, their orchard enterprise went bankrupt in 1917.

Just before the next intersection, there's a clear view of Town Hill Mountain on your right. You can see an area where timber was recently harvested. This is a variable retention timber harvest that you have an opportunity to observe more closely later in this tour.

### **01.8 Turn right at stop sign onto US Route 40 Scenic (*"The Road That Built the Nation"*)**

Green Ridge remains a "working forest." That means it has an active forest management program. Its primary objective is to provide a sustainable supply of wood products to support the regions industry and economy while maintaining and enhancing ecological functions of the forest.

### **04.3 Turn into parking area on the right, across from Town Hill Motel**

We recommend that you get out of your vehicle to take in the scenic beauty offered by the Town Hill Vista. As you gaze to the east, you can observe Sideling Hill Mountain and the Sideling Hill Cut that was formed for Interstate 68. Be sure to check out the "Beauty Spot of Maryland" wayside exhibit featuring information about the National Road.

**Continue driving tour via Tower Road**  
(*dirt road exiting backside of parking area*)

#### **04.9 On the left is the Town Hill Fire Tower** *(with other modern communication towers)*

Town Hill Fire Tower, constructed in 1931, is one of many towers that were traditionally manned during fire seasons for the purposes of detection and location of wildfires across the state. Forest Service personnel would spend their 8–12 hour shift in the tower during periods when forest fire indicators were high. The visibility from these vantage points allowed detection of fires many miles away by the rising smoke column. Furthermore, forest rangers could communicate with other towers, and with the aid of compasses and maps, use triangulation to pin point the location of the fire on the landscape. This information was then communicated to allow the forest service to get to the fires in a timely fashion, begin suppression, and minimize fire damage to the forest. These towers quit operating in the 1970s as communication technology and aviation resources became more prevalent.

#### **06.0 On the left is the Variable Retention Timber Harvest**

This was a mature timber stand similar to the adjacent forest. It was harvested during the fall of 2007 with the objective to regenerate the stand. Notice the dense growth of young trees that are thriving in the opening created by the harvest. This is the result of careful planning prior to removal of the mature stand to assure natural recruitment of a new productive stand with similar species composition. This is known as a regeneration system.

Most trees larger than two inches in diameter were cut to allow adequate light for regenerating a similar stand and to eliminate competition for the new stand. Also notice that there are some patches of uncut trees and a few individual mature trees remaining within the harvest area. This allows regeneration of a new productive stand while retaining some of the original stand to serve a vital role in protection or enhancement of other ecological functions such as stand structure and arrangement, species diversity, wildlife habitat, and sediment and erosion control. Retention of intact islands of forest and legacy trees also foster natural heritage protection and aesthetics.

### **Sustainable Forest Management through Area Regulation**

The state forest is dissected into four major management zones with different management objectives. Approximately half of the overall area is in the General Forest Zone. Areas within this zone are managed under the principle of area regulation on a 100-year rotation to generate a perpetual sustained yield of forest products. This means that a mature stand that is clear cut today will reach economic maturity again in 100 years. Under this principle, the annual final harvest area is calculated by taking the total acreage of the forest to be regulated in this manner and divide that number by the rotation age.

For Green Ridge, the general forest zone is approximately 25,000 acres, which means that 250 acres can be harvested each year within this zone. The sustainable harvest program within the general forest zone at Green Ridge is an adapted approach to this principle. The variation is that we manage approximately 250 acres of mature forest within this zone but do not necessarily harvest all of the area within the managed area. The variable retention area that you just observed had a managed area of 50 acres in which approximately 35 acres were harvested.

In other words, approximately 250 acres are mapped and managed each year for forest accounting under this principle. The actual harvest area within these areas will be variable depending on the amount of retention required to protect other ecological functions. This approach allows the forest manager to provide a sustainable supply of forest products to support the forest industry and economy of the region while preserving the other vital ecological functions within the general forest area throughout future generations.

### **07.3 Bear right to cross over I-68 bridge**

### **07.4 Turn left onto Mountain Road immediately after crossing bridge**

## **Fall Color**

Autumn begins to make its arrival known here before the advent of forest frost. Some tree species begin to show their true colors by the time the Autumnal Equinox arrives. Trees such as the black gum, sumac, flowering dogwood, and red maple display their unique hues of coral, scarlet, burgundy, and red and are the first indicators that fall is upon us. They will soon be



*Department Photo*

followed by the sugar maple, poplar, and hickory with their brilliant orange and yellow displays. The oak tend to hold out a bit longer but soon put on a showy medley of fall color as well. Typically, fall color peaks here between the second and fourth week in October.

Green Ridge employees are often confronted with the question, “How do the leaves change color?” Many people were told as children that Jack Frost brings the vibrant colors of red and gold to the woodlands each fall by pinching the leaves with his icy fingers. Others have heard Native American legends such as that the autumn colors were caused by the slaying of the Great Bear in the night sky by celestial hunters. According to this legend, it was the bear’s dripping blood that changed many leaves to red. The yellowing of leaves was believed to be the result of fat spattering from the kettle as the hunters cooled the meat of the Great Bear.

## Facts

The actual cause for color change is not as romantic as these legends but is an interesting phenomenon of nature. The photo-period (length of daylight) is the primary indicator to trees that winter is approaching and causes the plant to release a hormone that restricts the flow of sap to the leaves. Eventually the chlorophyll, the chemical that makes the leaf appear green and is used in the process of photosynthesis, disappears. When the chlorophyll is gone, we can see the true color of the leaves. The following loss of the leaves and dormancy is a survival technique to cope with winters frozen ground, when trees are unable to draw water.

### **09.0 Culvert crossing Mud Lick which flows into Fifteen Mile Creek**

Here you can observe a forest community representative of bottom land hardwoods. This natural community exists because of the deeper, more nutrient rich soil and available moisture found within the flood plain of Fifteen Mile Creek. Tree species that are present here include American sycamore, white ash, yellow poplar, elm, and Paw Paw.

### **09.2 Bear left to continue on Mountain Road**

*Fifteen Mile Creek and Campsite #82 are visible on your right*

## Primitive Camping



*Department Photo*

There are 100 designated primitive campsites dispersed throughout Green Ridge available to visitors throughout the year by permit. Campers must register for the campsite at forest headquarters prior to occupying the site. There is a \$10 per night permit fee for camping. There are also seven group sites available for groups of 20 or more that are available by reservation. Details on group site camping are available at forest headquarters.

Primitive camping has become rare as most public and private campgrounds have adopted a more improved and consolidated approach to managing camping facilities. Camping at Green Ridge is a primitive experience in that the sites have only a picnic table and fire ring. We urge our visitors to practice "Leave No Trace" principles as they enjoy a primitive and remote camping experience. Backcountry backpack camping is also permitted within the forest.

## Hiking Trails

Green Ridge has 50 miles of hiking trails available for day hikes or multi-day backpacking experiences. Trail guides are available for purchase at forest headquarters.

- 10.1 Bear right to remain on Mountain Road**
- 10.6 At stop sign, turn right onto Orleans Road**
- 12.8 Continue to the right**  
*The road to the left leads to Bill's Place and the C&O Canal*
- 13.0 Cross low water bridge over Fifteen Mile Creek**  
*Turn right onto Oldtown Orleans Road*
- 15.8 Turn left onto Carroll Road**
- 16.0 Park in lot on right to enjoy view of Point Lookout Overlook**

## Point Lookout



*Department Photo*

The name dates back to the Civil War era, when it was used by Union soldiers as a lookout and signal post. At 900 feet above sea level, Point Lookout was ideal for detecting Confederate movements toward the Maryland border. Many of the eastern red cedars and other trees on the slope directly below this platform were present when Point Lookout was named.

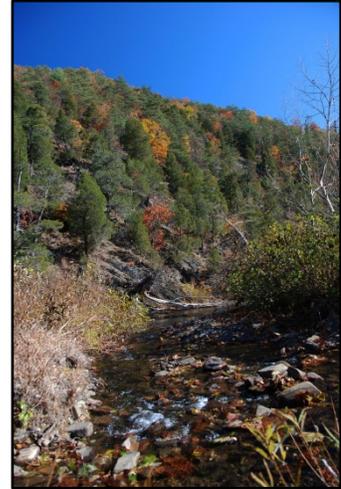
Looking eastward, you can see a spectacular view of the surrounding landscape as well as the Potomac River 300 feet below. On the far side of the river is West Virginia. This loop was once known as "General Washington's Horseshoe Bend." The C&O Canal is on the Maryland side of the river. This pioneering transportation system (1828-1924) extends 184.5 miles from Cumberland, Maryland to Georgetown near Washington, D.C.

## Ecology at Point Lookout

Notice the changes in vegetation from the flood plain of the Potomac River to the adjacent slopes. The tall, greener-looking trees in the bottom are a bottomland hardwood community that ends sharply as this east facing slope begins. This sharp transition is apparent because the rich sedimentary soils in the narrow flood plain offer dramatically different growing conditions than the shallow dry soils contained on the slope directly below this location. This is an old shale barren community adapted to surviving harsh growing conditions.

These soils are very steep, shallow, and offer little nutrition or moisture for plants. Therefore, any trees that survive have very stunted growth. Some of the eastern red cedars here have aged upwards of 350 years.

There are many shale barrens present within the state forest and this region. This is largely due to the topographic and soil conditions described above. Other factors include soil chemistry influenced by the shale parent material and the low precipitation rates of this region. Eastern Allegany County is the driest place in Maryland because it is in the rain shadow of the Allegheny Plateau. Average annual precipitation on Green Ridge is less than 36 inches versus 47 inches, the average just to the west in Garrett County. These conditions create unique site conditions that support small communities of vegetation that are rare within Maryland and the geographic region.



*Department Photo*

### **16.0 Turn around to head back the direction you came on Carroll Road**

### **16.2 Turn left at stop sign onto Oldtown Orleans Road**

### **19.2 Brinkman-Rine Cemetery (on the right)**

Many historic family cemeteries remain across the landscape at Green Ridge. More than 30 cemeteries have been located and documented. Descendants are encouraged to visit these sacred heritage sites and communicate with the forest managers to coordinate maintenance and improvement projects on the respective cemeteries.

## Timber stand improvement project

On both sides of the road is forest that was thinned during the summer of 2010. The original stand was the first commercial regeneration harvest that occurred on the forest after state ownership. This was a 200 acre clean cut completed in 1969. The current stand regenerated from that “clean cut” and had reached a point that it was overstocked, meaning that the trees were overcrowded for individual tree growth to remain strong. This situation results in

stagnated growth and makes the forest susceptible to insect and disease invasion. Thinning operations such as this are a tool that foresters use to maintain forest health and vitality. The trees removed yield some economic value as pulpwood while stimulating growth in the preferred growing stock within the stand and ultimately increasing the economic value of the final timber stand.

## **19.5 Turn right onto Mertens Avenue**

### **19.9 On the left is a remnant old growth forest**

Old growth forests have generally been defined as forests in existence since pre-settlement times and lacking any significant Euro-American disturbance. The definition can differ according to climatic and eco-regional perspectives and the growth characteristics of specific native forest systems. In Maryland, an old growth forest is defined as a minimum of five acres in size with a majority of old trees, of which the oldest trees exceeds at least half of the projected maximum attainable age for that species, and exhibits most of the following characteristics:

- Shade tolerant species present in all age and size classes;
- Randomly distributed canopy gaps;
- A high degree of structural diversity characterized by multiple growth layers— canopy, understory trees, shrub, herbaceous, ground layers—that reflect a wide age range;
- An accumulation of dead wood of varying sizes and stages of decomposition, standing and down, accompanied by excess in live dominant trees;
- Pit and mound topography can be observed, if soil conditions permit.

These characteristics exist in the stand on the left. If you want a closer look, pull off the road and take a short walk into the stand to observe an example of old growth forest on Green Ridge. As stated before, most of the forest was completely harvested in the past but some small areas were left. Such areas on the forest are identified through inventories and, when located, are protected through adaptive forest management.

## **20.7 Park in lot on left to enjoy Banner's Overlook**

### **Banner's Overlook**

This is another spectacular view from Town Hill Mountain looking east toward the Potomac River and West Virginia. Green Ridge includes approximately 30 miles of Potomac River shoreline, where canoeing is a popular recreation activity. Many parties enjoy day trips and overnight float trips.

A popular overnight canoe trip begins at the Paw Paw boat ramp near the Paw Paw Tunnel and meanders 12 miles along the Potomac Bends Wildlands to Bond's Landing where camping and

vehicle access is convenient. Typically the second leg of the float trip ends at the confluence of Fifteen Mile Creek near Bill's Place, nine miles downriver from Bond's Landing. There are local vendors that offer canoe rentals and/or shuttle service for these float trips.

The area directly below this overlook has regenerated naturally after a 200-acre wildfire that occurred during the fall of 1991. This wildfire occurred a short time after a renegade marijuana plantation was discovered nearby and destroyed by DNR.

**20.7 Turn back onto Mertens Avenue and continue west**

**22.6 Turn left onto Green Ridge Road**

**24.9 Pull into lot on right to enjoy Log Roll Overlook**

## **Log Roll Overlook**

This overlook faces west from Green Ridge. The stream at the bottom of the slope is Town Creek. The overlook gets its name from its historic use. During the era of major forest clearing, this was a location that wood was transported from the nearby ridges to be dumped over the edge to Town Creek. The stream was then used to transport the logs nine miles by stream, during periods of high water, to a sawmill located near the C&O Canal. The lumber was then transported to markets via the canal.

**24.9 Turn around and head back north on Green Ridge Road**

**26.6 Turn left onto Jacob's Road**

## **The Pines and Other Evergreens**

Another common question that Green Ridge staff are asked is, "why do the evergreens stay green all winter?" The surface area of evergreen leaves or needles is much less than deciduous leaves, and they have a waxy cuticle, so they lose much less water through evaporation. Evergreens do lose their foliage, but not all at one time. Leaves and needles live from one to six years, depending on species. New leaves or needles are produced each year and some of the old ones die and fall to the ground. This is not as noticeable because the new leaves or needles conceal the older ones.

There are five native species of pine that occur on Green Ridge. They include white pine, Virginia pine, pitch pine, short-leaf pine, and table-mountain pine. Other native conifers include eastern hemlock and eastern red cedar. These coniferous species add to the scenic splendor

throughout the forest all year long and more importantly play a vital role in winter cover habitat for many of the forest's wildlife species.

### 29.5 Cross small bridge over Maple Run

Early forest management activities were performed by the Civilian Conservation Corps in the 1930s. Three camps were located at Green Ridge; their main focus was fire control. Other work consisted of building roads, trails and recreational enhancements, and managing the existing forest for its future timber and wildlife potential. During World War II, the corps camp at Fifteen Mile Creek housed German prisoners of war, who mainly performed agricultural work. In 1955, the former camp site became home to Green Ridge Youth Camp. However, this camp was abandoned in the 1990s. These buildings are all that remain.



All of the land on the right side of Jacob's Road from Green Ridge Road to Twigg Road is part of the designated Maple Run Wildland. Maple Run, the stream you just crossed, bisects the 2,760 acre wildland flowing southwest from Mertens Avenue which is the northern boundary of this wildland. Wildlands are state legislated areas that have a higher level of protection and are not managed under the same model as the general forest as described above. These areas tend to be relatively roadless and serve as remote forest reserves and natural areas. There are more than 6,000 acres of designated wildlands within Green Ridge.

### Hunting and Fishing at Green Ridge



Department Photo

Green Ridge is open to public hunting and is regulated under the provisions of the Maryland Guide to Hunting and Trapping. Hunting remains the most popular form of recreation on the forest. White-tailed deer and wild turkey are the most targeted quarry, followed by small game such as squirrel and ruffed grouse. Many sportsmen depend on the state forest as a place to enjoy their favorite past time while the forest depends on the sportsmen to help keep wildlife populations at healthy levels for the wildlife and the natural forest ecology.

Angling is a similar recreation activity that is promoted within the forest. Fishing opportunities at Green Ridge include the Potomac River where bass, catfish, muskellunge, and sunfish are sought. Put and take trout fishing is popular on Fifteen Mile Creek, Sideling Hill Creek, and White Sulphur and Orchard ponds during the spring. Town Creek also offers a special management delayed harvest trout fishing program. All rules and regulations regarding fishing at Green Ridge can be found in the Maryland Fishing Guide that is issued with the Maryland Fishing License.



*Department Photo*

### **33.6 Turn left onto Mertens Avenue**

### **34.2 Turn right onto Troutman Road**

### **35.3 This is a fall color beauty spot**

## **Autumn Glory in the Northern Hardwoods**

The forest type at this location is less prevalent within the forest. The soils here are a little more nutrient rich and less acidic than much of the forest. These factors support a somewhat different forest community known as northern hardwoods. Characteristic species of this forest type include sugar maple, black cherry, basswood, white ash, and northern red and white oak. This area is largely a sugar maple grove which is vibrant with fall color if you are here at the peak of the color display.

### **35.7 Pull off on right side of road**

Directly across the road is an old logging road as well as the Green Ridge Mountain Bike Trail. Follow the bike trail (marked with pink blazes on trees) up the ridge for approximately 250 yards to the clearing on the right hand side.

## **Zumbrun Overlook and the Great Eastern Trail**

This overlook is named after previous forest manager, Francis “Champ” Zumbrun, who worked at Green Ridge from 1978—2009. This overlook offers a spectacular view from Polish Mountain to the west looking over the Town Creek Basin to Warrior Mountain and Flintstone. The trail behind the overlook is a 12.5-mile circuit Mountain Bike Trail. This is also the location where the Great Eastern Trail branches off the bike trail and makes its final descent from Green Ridge towards Flintstone.

The Great Eastern Trail plans to rival the Appalachian Trail in the future as it extends from Florida to New York when completed. The Maryland section of the Great Eastern Trail begins in Hancock and follows the C&O Canal towpath until it gets to Outdoor Club Road. It follows existing roads and trails throughout Green Ridge until it hits MD Route 144. Trail organizations are still working on the extensions of this trail north into Pennsylvania.

**35.7 Continue north on Troutman Road**

**36.6 To end tour, turn left onto Gilpin Road toward Flintstone**  
*Take I-68 West or East*

**OR**

**To finish tour, turn right onto Gilpin Road**

**36.9 Turn right at the stop sign onto MD 144 East.**

**40.7 Turn left at stop sign onto US Route 40 Scenic**  
*("The Road That Built the Nation")*

**40.8 Cross bridge over Fifteen Mile Creek**

**41.9 On the right is the Green Ridge State Forest Shooting Range.**

## **Green Ridge State Forest Shooting Range**

The shooting range was developed from the collection of hunting license fees and established to benefit the veteran and novice outdoor sportsmen alike. It is a well-maintained facility that visitors may use by registering for a daily or annual permit available only at forest headquarters. The range may be reserved by various law enforcement or other agencies to conduct training or hunting safety courses.

**42.2 Take a sharp right turn back onto MV Smith Road**  
*(On the left is Town Hill and Variable Retention Timber Harvest)*

**44.1 Turn right onto Forest Court and follow back to forest headquarters**



*Department Photo*

We hope you enjoyed your tour through Green Ridge State Forest. Thanks for visiting—come back soon!