Geocaches

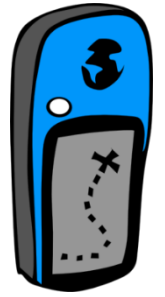**Powdermill Nature Reserve** — Research, Education, Conservation

Picnic in the Woods

Coordinates: **N 40° 09.600' W 79° 16.364'**

Start your geocaching journey at Powdermill Nature Reserve off right by eating a good meal. This way you will have energy to find all of them! While you eat, look around at the different types of vegetation and watch out for little chipmunks that might try to steal your food. We don't want you to feed them!

Live Life on the Old Forest Edge

Coordinates: **N 40° 09.665' W 79° 16.367'**

You might be thinking, "This isn't a forest edge..." when you visit this site. But, although you are completely surrounded by forest, take a closer look at a few of the nearby trees. Do you see them? The really big trees? Some are even dying. Notice the trees with big branches that stretch way out. Notice that they are arranged in line with each other. These trees indicate that they were once on the edge of a forest next to a field. Visit the Powdermill Nature Center to see some historical maps that show aerial images from as early as 1939 to see what this area use to look like.

Merging Streams

Coordinates: **N 40° 09.715' W 79° 16.428'**

At this very beautiful site you are standing near the confluence of Powdermill Run and White Oak Run. Powdermill Run begins from an underground source and after merging with White Oak Run spills into Loyalhanna Creek. The exceptional stream before you is part of an essential cycle which nurtures all life. Within and along the stream, countless species are provided with an excellent habitat. Mayflies and Stoneflies are two examples of insects which start out life underwater as nymphs, only able to survive in clean water. To learn more about this exceptional value stream visit the nature center.

Moving Stream Bed

Coordinates: **N 40° 09.676' W 79° 16.331'**

It's a wetland...no wait, maybe it's a stream! Scientists have long known that the path of a stream can change over time, especially after a flooding event. Here, you can see what may be a historic stream bed that at one time was possibly where Powdermill Run flowed, but it is now a wetland. The natural landscape is constantly changing everywhere due to natural processes such as flooding. Even the Mississippi River has changed its course over time. Wetlands such as these contain many ecologically important plant and animal species. Wetland plants help filter the water, which benefits the animals living near here.
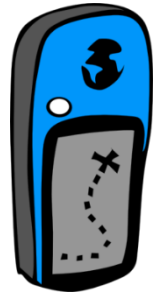
Butterfly Garden

Coordinates: **N 40° 09.630' W 79° 16.298'**

At this final geocache of the day stop and take a look around. Notice the abundance of insects and plant life in your vicinity? This area represents an ecosystem not unlike your own backyard, here you will see insects such as butterflies and bees busy at work eating vegetation and pollinating the local flowers. Stop and take a moment to reflect on your time at Powdermill Nature Reserve and thank you for visiting?

Geocaching Instructions

What is Geocaching?

Geocaching is a modern-day outdoor recreational activity that is similar to a scavenger hunt. Geocaches typically are small waterproof containers that include a logbook that geocachers may sign and sometimes trade items. Geocaches are hidden in places around the world and you're given clues and GPS coordinates to help you find it. For more information, please visit:

www.OpenCaching.com or www.Geocaching.com

Rules & Etiquette

As long as you exercise a little common sense and etiquette, you can ensure a successful trip for you and those who come after you. Here are a couple of things to keep in mind:

- All Powdermill geocaches are near the Black Birch Trail, but not on the trail. You may venture off trail to find the geocaches, but please be mindful of how far you venture off trail. If you can't see that trail, you've gone too far!
- Never move or remove a geocache, anywhere! Do not remove the logbook or any other item labeled, "DO NOT REMOVE". Report any issues with the geocaches to Powdermill Nature Reserve staff.
- Powdermill geocaches may have items that you can trade, so feel free to trade! However, don't leave behind objects that may injure or offend other geocachers.
- Don't point out cache locations to people who aren't geocachers. They'll just ruin our fun.
- Respect local laws, including property boundaries. Please stay on Powdermill Nature Reserve land only. If unsure, you should reference the trail map.
- Keep things safe and exercise the principles of Leave No Trace. For more information, visit www.lnt.org.
- The last rule is the most important… *HAVE FUN!!!*

Instructions

- **Select the Geocache(s) –** There are five geocaches located on Powdermill Nature Reserve property. Use the descriptions provided to you to decide which geocache you want to find.
- **Enter or Download GPS Coordinates –** Follow the instructions of your GPS receiver or smartphone GPS app to enter the coordinates of each geocache you wish to find. The standard coordinate format for geocaching is entered as degrees decimal minutes. The format will look like **N 40° 09.635' W 79° 16.298'.** *Or*, you can download the geocaches to your GPS device from www.OpenCaching.com. You can also use the OpenCaching smartphone app. **Note:** *If you do not have a GPS device or smartphone, a geocaching map is available at the Powdermill Nature Center front desk.*
- **Navigate to Geocache –** Once you have the geocache coordinates entered or downloaded into your GPS or smartphone you are ready to go geocaching. Select the geocache you would like to visit and use the **Go/Where/ Navigate To** function on your GPS device. The GPS will now show your distance from the geocache and the direction you need to go to find it. **Hint**: *It is recommended to begin your geocaching journey at the Black Birch Trail entrance located near the amphitheater and continue along the trail in a clockwise direction.*
- **Finding the Geocache –** GPS devices only have enough accuracy to get you within 10-25 feet of the actual location of the geocache. In other words wherever your GPS tells you to go the actual location of the geocache could be up to 25 feet in any direction. Use the clue provided and logic to locate the geocache. **Remember**: *Powdermill Nature Reserve geocaches are not far from the trail or hard to locate but they will not be in plain sight.*
- **Open the Geocache –** Inside each geocache you will find a logbook where you can leave a short entry to verify that you were there. An example would be "*05/06/2013 A. Smith Thanks for the cache!!*" Please replace the geocache as it was found and move on to the next one.

Happy Hunting!!