Topographic Map Uses are as Varied as Ohio's Topography

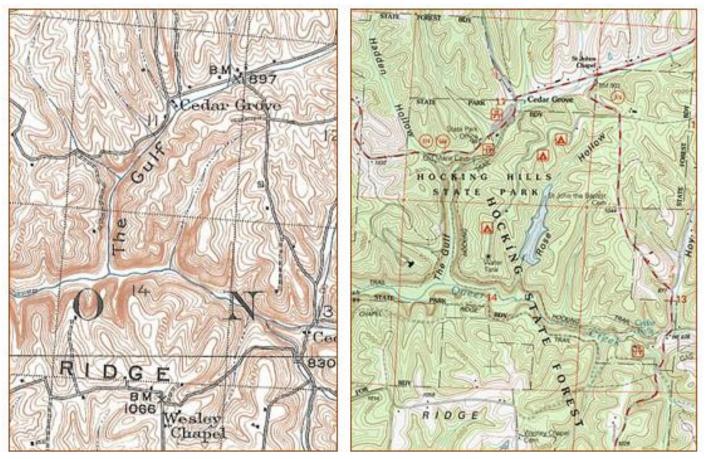
by Madge Fitak

June 24, 2010—The ODNR Division of Geological Survey is a distributor of the U.S. Geological Survey topographic maps of Ohio. There are 788 7.5-minute topographic (or "topo") maps that cover Ohio. Each map covers about 56 square miles, at a scale of 1 inch to 24,000 inches (or 1 inch equals 2000 feet); show all surface features; and indicate elevation using contour lines.

Detailed list of USGS topo maps available from the Division of Geological Survey.

Topo maps are used every day by numerous professionals, government officials, teachers, hobbyists, and genealogists. For example, topo maps are used by environmental consulting firms to study watersheds and building sites; by oil and gas companies to determine the placement of a new wells; by mining operations to determine a good site for a quarry; and by cellular phone companies to determine placement of towers, just to name a few.

Government agencies also use topo maps for long-range planning and studying. For instance, the FBI uses them to track escapees. And the military uses them for tactical training exercises.



Two topographic map images for the Hocking Hills area (Hocking County): the 1912 Laurelville 15-minute quadrangle (left) and the 2002 South Bloomingville 7.5-minute quadrangle (right). The 1912 topo map was produced before much of the area became state park and state forest land; note the absence of several features, including Old Man's Cave, Rose Lake, and campgrounds.

Topo maps also aid teachers in instructing students to develop map reading skills. Students learn to locate their school, homes, or favorite parks using a topo map and to determine the elevation of each. Boy Scouts use the maps for hiking and orienteering at many Boy Scout camps and local parks. Hikers and naturalists use topo maps for a vast number of endeavors. Such maps can be used for hiking any number of trails throughout Ohio, including Buckeye Trail and those in Shawnee and Zaleski state forests. They have also been used for

determining the best place to look for mushrooms and wildflowers. Topo maps are also used by search-andrescue teams when locating missing persons or animals. And genealogists enjoy using them to find old cemeteries, school buildings, railroads, crossroad communities, or possibly an old family homestead.

Hunters use topo maps for hunting at their favorite wildlife areas, and fishermen often use them to determine the bottom structures of their favorite fishing holes. This sometimes involves getting a copy of an earlier edition of a map, to determine what an area was like before a reservoir was built.

The Division is a wonderful resource for early editions of topo maps. The earliest editions of most of Ohio's 7.5-minute maps were printed about 1960. Prior to that, 15-minute maps were used. These 15-minute maps date back to the early 1900s. At a scale of 1:62,500 (or 1 inch equals one mile), each map covers about 224 square miles. They are useful in locating surface features that no longer exist, such as roads, railroads, schoolhouses, and even small crossroad communities.

Topo maps often are framed and hung on walls in offices or family rooms. Crafters have even laminated them and used them as placemats or have cut up old maps to create stationary and greeting cards.

Use the following links to learn more about topographic maps and about Ohio's topography:

- Detailed list of USGS topo maps available from the Division of Geological Survey.
- Index to 7.5- and 15-minute quadrangles. [1.2 MB PDF]
- USGS Topographic Maps (USGS Web site).
- Educational Leaflet 16: <u>Ohio Topographic Maps</u>. [1.6 MB PDF]
- Shaded Elevation Map of Ohio:
 - Spectral version. [1.2 MB PDF]
 - о <u>Earth-tone version</u>. [1.1 мв РDF]
- Ordering information.