

Developing Conservation Sites for Virginia's Significant Caves

*Wil Orndorff, Karst Protection Coordinator
Virginia Department of Conservation and Recreation
7502 Lee Highway, 2nd Floor
Radford, VA 24141
Phone: 540-831-4056
E-mail: worndorff@dcr.state.va.us*

Ben Schwartz, Virginia Tech

Zenab Orndorff, Virginia Tech

Joey Fagan, Virginia Division of Natural Heritage

Carol Zokaites, Virginia Division of Natural Heritage

Abstract

About 360 (approximately 9%) of Virginia's 4,100 documented caves are designated "significant." The Virginia Speleological Survey maintains the significant cave list for the governor-appointed Cave Board, established by the Virginia Cave Protection Act of 1979. Though affording no specific legal protections, significance designation confers importance from a conservation perspective. Potential impacts to significant caves are considered during the state environmental review process. Virginia Speleological Survey upkeep of the list has advantages, including protection of cave entrance locations and incorporation of recent cave exploration. This arrangement has, however, hindered Cave Board involvement and placed a greater burden on the Virginia Speleological Survey.

Virginia's Natural Heritage Program defines "Conservation Sites" as areas where land use activities could potentially impact natural heritage resources - rare plants, animals, or natural communities, or significant caves. Conservation sites are assigned a biodiversity ranking based on the number, rarity, and quality of biological elements. "Conservation Sites" have no state regulatory function, and are simply landscape areas worthy of stewardship and protection. Two major functions of conservation sites are environmental project review and prioritization of land to incorporate in the Natural Area Preserve System.

Currently, 66 conservation sites encompass 136 significant caves. These conservation sites allow the Cave Board access to the significant cave list without revealing entrance locations, providing instead more useful landscape information. Dye tracing has played a major role in development of conservation sites for hydrologically significant caves. The remaining 200+ significant caves are represented as 3-kilometer-diameter circles, replaced by conservation sites as they are developed.

About the Author

Wil Orndorff is the Karst Protection Coordinator for the Virginia Division of Natural Heritage. His professional duties include designing conservation site boundaries for significant caves, conducting karst hydrology investigations, performing inventories of

karst features, sampling caves for biological resources, monitoring water quality and cave habitats, reviewing development projects for potential impacts to karst, and serving as a staff resource for the Virginia Cave Board. In his copious spare time, Wil is active in cave exploration as well as cycling, music, gardening, and parenting.