
Preface

Way back in the 1940s, William E. Davies, pioneering cave geologist, best known for writing *Caves of West Virginia*, casts about for the best locations in the Appalachians where exceptionally large caves might be found. He announced that the most potential was to be found in a small synclinal valley in west central Virginia called Burnsville Cove. The Tonoloway and Helderberg limestones reach their maximum thickness in the Cove, or the order of 800 feet, before they facie into sandstone farther to the south. The geologic structure wraps the limestones around the anticlinal and synclinal axes in such a way as to permit extensive cave development. Most obvious, and requiring less intricate geological reasoning, was the observation that Sinking Creek, the main drainage of the Cove, is underground for most of its route.

A number of mostly small caves were known in Burnsville Cove in the 1940s, but an exception was Burnsville Saltpetre Cave, later known as Breathing Cave, certainly a very large cave by the standards of the day. Cavers from the Nittany Grotto at the Pennsylvania State University became interested in Breathing Cave in the mid-1950s and took on the project of producing a high-quality map. One of the Nittany cavers, George Deike, decided to write his masters thesis on a geological interpretation of Breathing Cave. While Deike's thesis research was underway, I. Kennedy (Ike) Nicholson, his sons, and their friends were searching the Cove for Davies' hypothetical giant cave system. In May of 1958, as the Breathing Cave work was drawing to a close, the searchers found air blowing from beneath a sandstone ledge on the side of a large sinkhole. The Butler Cave-Sinking Creek System had been discovered. Nittany cavers teamed up with the Nicholson family and their group to produce a map and further explore this spectacular new discovery.

The sinkhole containing the only natural entrance to Butler Cave lies on the flank of Jack Mountain, half a mile west and on the opposite side of a ridge from the public road in Burnsville Cove. Access was always somewhat problematic and depended on the good will of land owners whose property must be crossed to reach the cave. There was also the question of controlling access and thus protecting the cave as its size and location became more widely known among the caving community. To solve both of these problems, the Butler Cave Conservation Society was formed in 1968, formally incorporated as a legal entity in the State of Virginia. The BCCS could then lease the cave from the owner and legally install a gate to control access.

As time went on, BCCS purchased the Butler farm and became involved with the exploration of other caves in the Cove. There were further major discoveries on the Chestnut Ridge side of the valley, and in due course, additional properties were purchased. Thus, the year 2008 marked the 50th anniversary of the discovery of

Butler Cave and the 40th anniversary of the founding of the Butler Cave Conservation Society. To celebrate the occasion, the BCCS set out to compile this account of the accomplishments of the past half century. The intent had been to complete the book for distribution at the celebration, but new discoveries outran the editorial process. The discovery of Helictite Cave, then the Subway Section of Water Sinks Cave, and then the large cave called the Wishing Well all required new chapters for the rapidly growing document. In the spring of 2012, BCCS purchased a property containing the sinkhole called Robin's Rift, the collapsed entrance has been dug open and stabilized, and now, exploration and survey is underway. But it is necessary to draw a line and publish the story to date. This book is a milestone in the exploration and study of the caves of Burnsville Cove; it is not the end of the story.

The book has three parallel themes. One is to tell the story of the explorations in Burnsville Cove and the discoveries that have resulted. The second is to document the BCCS organization itself, how it operates, and how it has succeeded in being a good steward for the properties that it owns. The third theme is scientific. It recounts the knowledge that has been gained by the study of the caves in Burnsville Cove.

Curiously, after 50 years of exploration, remarkably little has been published about the caves of Burnsville Cove. In 1982, BCCS members put together a collection of scientific papers that were published as a special theme issue of the *National Speleological Society Bulletin*. At that time, very little was known about the caves under Chestnut Ridge so the scientific discussion focused almost entirely on Butler Cave. Scientific papers are an important means of sharing knowledge, but the editorial custom in scientific writing makes the papers dry as dust for the general reader. Exploration stories are much more interesting. Although the BCCS has published an annual newsletter containing write-ups on many of the exploration trips, the circulation is limited. There is value in telling the exploration stories in more detail and in a more systematic fashion. Further, these chapters emphasize the human interest side of exploration. Butler Cave is big and therefore challenging, but it is not intrinsically difficult. There are few places in Butler Cave that are beyond the abilities of the moderately competent caver. The caves of Chestnut Ridge are an entirely different story. The exploration of the Chestnut Ridge System required strength of body and strength of will that very few cavers were capable of attaining. These exploration stories, therefore, take on a special significance. One may also note the increasing effort required to get access to the caves in the first place. Breathing Cave, the first to be mapped and studied, has a walk-in (or crawl-in) entrance. Opening Butler Cave required moving only a few rocks. Contrast these with the digging efforts required to open the Wishing Well to exploration.

The earlier chapters tell the exploration stories partly in historical and partly geographical order. Butler Cave was the first to be discovered and is documented in Chap. 2 which also includes some of the history of Breathing Cave. Butler Cave focuses attention on the caves associated with the springs which are described in Chap. 4. Then, the tale moves to Chestnut Ridge with chapters on first Bobcat, then Blarney Stone, then Burns, and finally what are referred to as the "pancake caves." Together, these make up the Chestnut Ridge Cave System. Barberry Cave (Chap. 10) forms a link between the Chestnut Ridge System and Butler Cave, a link that is tantalizingly close to completion at the time of this writing. The most recent impressive discoveries are in the downstream end of the Sinking Creek Valley and so the final exploration chapters describe caves found in the Water Sinks Depression and the most recent breakthrough into a large cave through the dig known as the

Wishing Well. Some of the chapters in this book are original. Others are based on previously published material (as indicated in the chapters). However, most of the previously published material has been edited, revised, and updated to various degrees. The maps of the large cave systems are included in electronic form so that all of the fine detail can be displayed without the necessity of large sheets of paper.

Acknowledgments

This book is a group effort of many BCCS cavers, many more than those whose names appear as chapter authors. It is an attempt to display, between one set of covers, what has been discovered over the past 50 years and also the very human effort that was expended to bring those discoveries into being. We must acknowledge the contributions of all members and friends of the BCCS, past and present.

Also acknowledged are:

The late Carl Butler who permitted access to his farm for many years and was willing to lease the cave entrance to the BCCS.

Landowners who have permitted BCCS members to prospect for caves on their land. Pancake weekends would not have been possible without these friendly landowners.

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