

Battle Park: A Mushroom Mecca

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The UNC Herbarium is the home of voucher specimens of not only vascular plants but also algae, fossils, and fungi. Many of these specimens were collected from places beyond Chapel Hill. A notable number, however, were collected close to home, including such places as Battle Park, a naturalist's haven in the heart of Chapel Hill on the east side of the UNC campus. Battle Park's botanical bounty includes shrubs, trees, wildflowers, ferns, lichens, and mosses. Lesser known to most people are the variety of fleshy fungi that grow on the park's forest floor and on decaying vegetation.

Taxonomists no longer place fungi in the plant kingdom, in part because they lack chlorophyll. Instead, the fungi comprise



their own kingdom, "Fungi." Fleshy fungi such as mushrooms can be found in the park throughout the year. Climatic factors, such as the amount of rainfall, will influence their growth and number. In the winter

months during warm periods, the oyster mushroom erupts from the bark of dying trees. In early spring, the delectable and highly-prized edible morel grows along the creeks, particularly where water overflows the banks, and on moist but well-drained slopes. Mushrooms are the most plentiful in the summer and fall months.

The form, size, and color of mushrooms vary greatly. Shapes include the typical mushrooms with caps, gills, and stalks (like the ones in the grocery store); others look like coral, little clubs, birds' nests, golf balls, ears, and trumpets. Their colors span the spectrum from brilliant red, purple, yellow, and orange, to even green. Some species are as small as a child's pinky finger and others are as large as a football. Although most mushrooms have an earthy aroma, others impart distinctive smells resembling chlorine, radishes, apricots, or rotting flesh.

During the past century, many people have contributed to our knowledge of Battle Park's fungi, in particular, William Chambers Coker and members



Editor's Note: Battle Park is a nature preserve, and the collection of specimens for personal use is *not* permitted. Distinguishing edible mushrooms from poisonous and lethal species requires a thorough knowledge of their identification, which can be gained through specialized courses taught by mushroom experts.

of the Triangle Area Mushroom Club. Hired as the first botany professor at UNC in 1902, Coker aimed to promote an understanding and appreciation of nature and to advance botanical knowledge. Mycology, the study of fungi, was one of his major areas of research and publication. Battle Park was among the field sites where he collected specimens, which he later preserved as "vouchers" in the UNC Herbarium.

The Triangle Area Mushroom Club, established in 1982, sponsored over twelve mushroom forays in Battle Park from 1991 to 1995. Based on nine of these outings, club members compiled and published lists of species in their newsletter, recording nearly 175 species of fungi during these years.

Since the North Carolina Botanical Garden assumed responsibility for the park in July 2004, trail restoration and new outreach programs have raised public awareness of the park. In April 2005, the Garden sponsored a Battle Park bioblitz: participants met at Forest Theatre and then split into small groups according to kinds of organisms (fungi, lichens, mosses, plants, birds, etc.). After about an hour of observation, the groups reassembled at the Theatre, where each group described the significant species found and (in the case of botanical specimens) collected.

In September 2006, I presented a program on mushrooms to a group of fourteen people at the park. Beginning with an informal lecture on mushrooms and how to collect them, I then led the group onto a trail in search of specimens. After observing and collecting nearly 40 mushrooms, we returned to the park's picnic tables. Using these specimens, I then described the structure of mushrooms and how to distinguish their different groups. Participants learned two species with certainty: giant puffballs and black chanterelles, both edible species.

The fungi are an important component of Battle Park's

ecosystem, providing food to wildlife and recycling nutrients through the decomposition of organic matter. Learning about the fungi of the park will increase our appreciation of not only their beauty and diversity but also their role in nature.

Top: Oyster mushrooms
Bottom: Morels (Photos courtesy of Professor Rytas Vilgalys, Duke University)