immigrants in the 1880s until the last cave ceased production in the 1960s during the creation of Lilydale Regional Park. Notable examples are Altendorfer, Bisciglia, Lehmann, and Peltier caves.

Some of the approximately fifty caves originated as sand mines, and not all were used for mushroom growing. Examination of city directories and Sanborn insurance atlases revealed that other common uses were aging of cheese (Land O' Lakes), lagering of beer (Yoerg's Brewery), and storage (Villaume Box & Lumber). The University of Minnesota rented caves in the 1930s for experimental ripening of blue cheese. A cave used by the St. Paul Brick Company later was gated as a bat hibernaculum by the Minnesota Department of Natural Resources. Mystic Caverns and Castle Royal were underground nightclubs in the 1930s, the latter hosting the Howdy Party for the 1980 N. S. S. Convention.

The caves were surveyed during a civil defense study in the early 1960s. The typical cave is a straight, horizontal passage fifty meters long, but often connected by cross-cuts to similar caves on either side, creating network mazes with multiple entrances. A cave operated by the Becker Sand & Mushroom Company is the largest of all, with ten-meter ceilings and more than a kilometer of passages.

**DISPROVING A NEGATIVE: THE ALLEGED BLIND CAVE FISH FROM PENNSYLVANIA NEVER EXISTED**

By Aldemaro Romero

In 1864 Edward Drinker Cope published a report on what he thought to be a new species and genus of troglobitic (blind, depigmented) cave fish, from Pennsylvania. As late as 1986 some authors, based on Cope's article, have continued to assume that there are troglobitic fishes in that state. An analysis of those reports as well as of studies on the fish and cave fauna for Pennsylvania from the historical, biological, and speleological viewpoint is presented. The results of this study fail to provide any evidence that such fish exist or ever existed. The original unsubstantiated reports seem to be based on the assumption that you cannot prove a negative, i.e., that we cannot prove that something does not exist just because we have not found it.

**EDMUND RUFFIN AND THE CYMBEE OF WOODBOO**

By Cato Holler, Jr.

Edmund Ruffin was a noted nineteenth century agricultural reformer from Virginia as well as a staunch supporter of slavery. Civil War enthusiasts may remember him best as the individual who was selected to fire the first shot on Fort Sumter, South Carolina, thus beginning the War Between the States. Less known, perhaps, are Ruffin's antebellum speleological endeavors. In 1843 at the request of Palmetto State governor, James Hammond, Ruffin spent eight months conducting an intense agricultural and geological survey of South Carolina. Much of his time was spent in locating limestone and marl deposits which he felt could be used wisely for agricultural purposes. During his field work, Ruffin turned up a number of interesting caves and karst features within the state. He described these in detail in his private diary. While visiting and talking with some of the locals, he was also introduced to a bit of folklore concerning the legendary inhabitant of a particular karst spring. This was a peculiar supernatural being or water sprite which the local Negroes called "the Cymbee of Woodboo."

84

Journal of Speleological History