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Because it is the Earth's most extensive known cave system, the Mammoth Cave System and more broadly the south central Kentucky karst region have long been a magnet for scientists, students, and explorers interested in caves and karst landscapes. With a known length of 590+ km, also nearby are the Fisher Ridge (177+ km) and Whigpistle (52+ km) Cave Systems, and all of these are still being actively explored. A "perfect storm" of integrated speleogenetic elements has conspired to form these extensive labyrinths, whose significance has been codified as a US National Park, UNESCO World Heritage Site and International Biosphere Reserve.

Since at least the late nineteenth century, the Mammoth Cave area has been the quintessential karst landscape of the United States, and indeed can be considered the birthplace of modern cave science in the country. Since then, work there has resulted in broadly important contributions to karst science and education. Some highlights include:

1) Early efforts to move interest in caves from sport to serious science through the efforts of the Cave Research Foundation (CRF) and its first President Phil Smith;

2) Development of methodologies for the implementation and management of very extensive cave surveys by the CRF and Central Kentucky Karst Coalition;

3) Development of methodologies for fluorescent dye tracing and delineation of karst groundwater recharge areas, particularly in efforts led by Jim Quinlan of the National Park Service;

4) Pioneering work in cave biology and ecology including that of Tom Kane and Tom Poulson;

5) Understanding of ancient agricultural and cultural development of Native American populations by cave studies of P.J. Watson and colleagues;

6) Development of methodologies for karst hydrogeological studies by Art and Peg Palmer, W.B. White, J. Hess, C. Groves and J. Meiman, and others;

7) Implementation of methods for absolute dating of landscape evolution in karst areas, including the efforts of Victor Schmidt (paleomagnetism), Harmon, Schwarz, and Ford (speleothem isotopes) and Darryl Granger (comogenic nuclides);

8) Establishment of the educational programs of Western Kentucky University's Center for Cave and Karst Studies and Karst Field Studies Program at Mammoth Cave by Nick Crawford in 1979. Many renowned karst scientists (including Professors Ford and Williams, who have both also undertaken research in the area) have taught courses in this program, and over 1,000 students have participated.

A great charm of the region, and a great benefit for the programs at Western Kentucky University, is that it finds itself on the list of "must see" karst areas of the world, along with Postojna, Slovenia and Guilin, China, and thus a stream of the world's top karst scientists, and the great ideas they bring with them, continually passes through.