



Project Status Report 99-07

Upper Mississippi River
Long Term Resource Monitoring Program
U.S. Geological Survey

A Natural History of the Middle Mississippi River

by

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In 1993, the Upper Mississippi River Conservation Committee (UMRCC) issued a call for action report, "Facing the Threat: An Ecosystem Management Strategy for the Upper Mississippi River." The report identified environmental problems in the Upper Mississippi River (UMR) and challenged the President, Congress, federal agencies, and states to develop a "scientifically sound ecosystem management strategy for the UMR" by 2000 and implement the strategy over the ensuing fifty years.

Given the information-oriented mission of the Long Term Resource Monitoring Program, staff at the Open River Field Station took an active role in developing a plan for the unimpounded open river reach of the UMR. This reach, known as the Middle Mississippi River (MMR), is that segment between the confluences of the Missouri and Ohio Rivers. The committee formed in 1994 to develop the ecosystem management strategy for the MMR was named the Middle Mississippi River Ecosystem Management Work Group (work group).

During the first meeting of the work group, it became apparent that virtually no background information had been assembled on the natural environment of the MMR. Some members believed that without this information, a comprehensive ecosystem management strategy could not be developed. Work group members began gathering information, but soon realized the time needed to adequately address this task was greater than anyone could justify. The work group then approached the UMRCC to cosponsor an investigation into the natural history of the MMR, which they agreed to, and the project began in 1997. Since then, we have been gathering accounts describing the MMR environment from the point of European discovery, roughly 1600 AD, to the present. We separated our research into three phases; two dedicated to gathering material and one to writing the history.

Our work began by studying Carl J. Ekberg's translation of Nicolas de Finiels' 1803 manuscript, *An Account of Upper Louisiana*. Finiels, a French engineer, was employed by the Spanish government at various times from 1797 to 1818 to develop and oversee a number of projects throughout the Louisiana Territory. Finiels made the observations that would later appear in his *Ac-*



The Devil's Bake Oven and the Grand Tower

Figure 1. Plate of Middle Mississippi River, circa 1848. From Seth Eastman's *Mississippi: A lost portfolio recovered*. University of Illinois Press.

count as he traveled up the Mississippi River to St. Louis in early 1797. He also produced a detailed map of the MMR valley, drawn during 1797-1798. Both are generally considered to be excellent sources of late 18th-century physical information for our area of investigation and provide us with the necessary background to design our research plan.

Finiels' manuscript and map proved to be very helpful, as did Ekberg's and William Foley's editing of *An Account of Upper Louisiana*. The book's accompanying notes and bibliography familiarized us with standard texts used to conduct preliminary historical research into our subject. As we consulted these sources, we became familiar with scholars who conducted extensive research upon the same or related topics. We collected a large amount of information from these sources, as well as from numerous manuscript collections, journal and magazine articles, government documents, newspapers, maps, drawings, photographs, and oral interviews.

Particularly informative were two series edited by Rueben Gold Thwaites, *The Jesuit Relations and Allied Documents*, 1610-1791 (73 volumes) and *Early Western Travels, 1748-1846* (32 volumes). The first series contained correspondence and reports

(over)

Near the Mouth of the Ohio



Figure 2. Plate of Middle Mississippi River, circa 1848. From Seth Eastman's *Mississippi: A lost portfolio recovered*. University of Illinois Press.

generated by Jesuit missionaries during their service in North America. A number of these documents were very descriptive of the Mississippi River and its environment. The second was a compilation of some of the diaries held by the State Historical Society of Wisconsin. We examined those containing descriptions of the MMR and related plants, animals, and human activity. Several of the diaries contained within this series were published in book-length format in recent years.

Other sources we found useful in locating information about the early European presence in the MMR were: Philip Pittman's *The Present State of the European Settlements on the Mississippi* (1765-1768), Thomas Hutchins' *A Historical Narrative and Topographical Description of Louisiana and West Florida* (published 1784), Georges-Victor Collot's *A Journey in North America* (1796), Gilbert Imlay's *A Topographical Description of the Western Territory of North America* (published 1798), and Henry M. Brackenridge's *Views of Louisiana* (published 1814). We frequently used material contained in the writings and sources of Clarence W. Alvord, Carl J. Ekberg, William E. Foley, John Francis McDermott, and Abraham P. Nasatir, all of whom conducted extensive research on our subject.

River guides (e.g., the *Navigator*, *Western Pilot*, and *James River Guide*) and drawings, panoramas, and lithographs of the period are also informative (Figures 1 and 2). These visual sources, particularly useful in our effort to understand how the MMR changed through time, must be interpreted with caution, particularly the drawings and lithographs that may have been romanticized for the intended audience. Even so, most are highly detailed and many were generated by individuals employed by a govern-

ment or commercial entity or who had a scientific interest in the surroundings they were recording.

Throughout our research we looked for primary documents to use as sources in our natural history project. We gathered material from manuscript collections held at the Missouri Historical Society, Missouri State Archives, Western Historical Manuscripts Collection, and other repositories. We found that these descriptive letters and diary excerpts echoed the accounts that appeared in the publications we reviewed.

We increasingly relied upon journal articles and government documents to locate information relative from 1875 to the present and were not disappointed by the amount of material available referencing this time period. Journal articles were particularly useful in determining the validity of some of the very early accounts and maps of the MMR. Government documents provided insight into various government agencies' relationship to the MMR by detailing a particular organization's responsibility to both the general public and the environment.

We discovered a large amount of material relative to the MMR held in libraries and archives throughout the world. Although empirical scientific data on MMR resources is rare prior to the 1960's, the variety and richness of descriptive information encountered so far surprised us. The sources listed in this report represent only a fraction of the material accumulated during our research. Analyses of historical and current scientific information will shed new light on how the MMR has changed over time. As we review the material in preparation for writing our manuscript, we will look for recurrent themes to help us understand the natural history of the MMR. □

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