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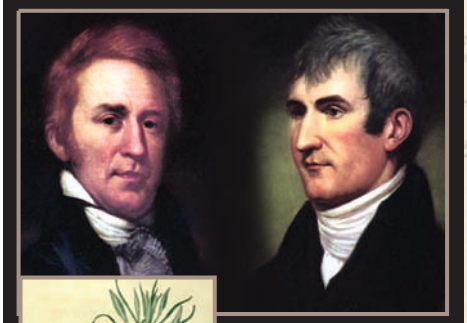

Courtesy of the American Philosophical Society

Courtesy of the Joslyn Art Museum

Photo by D.J. Nichols, USGS

# Continuing the Legacy of Lewis and Clark

**On June 20, 1803, President Thomas Jefferson sent careful instructions to Meriwether Lewis that outlined the scientific goals of Lewis and Clark's bold transcontinental mission.**

Excerpts of President Jefferson's instructions:

> Explore the Missouri river... & communication with the waters of the Pacific Ocean;
>
> Take observations of latitude & longitude, courses of the river, variations of the compass;
>
> [Observe] the soil & face of the country, ... growth & vegetable productions;
>
> the animals of the country, the mineral productions of every kind;
>
> volcanic appearances, ... climate, ...particular plants, birds, reptiles or insects.

## The Legacy

Even before the United States purchased the Louisiana Territory from France in 1803, President Thomas Jefferson had already commissioned Meriwether Lewis to explore the continent west to the Pacific Ocean. For hundreds of years, the fabled Northwest Passage had inspired explorers as they tried to find a navigable route through North America. President Thomas Jefferson still envisioned the advantages such a water route would bring to the Nation when he instructed Meriwether Lewis about his mission.

Lewis and Clark's *Corps of Discovery* was the Nation's first federally funded scientific expedition. In carrying out Jefferson's instructions, the explorers mapped every twist and turn of the Missouri, Columbia, and other rivers. They also gathered information about the soils, plants, animals, and native inhabitants of the lands through which they passed.

The Lewis and Clark Expedition was the first of many government surveys of natural resources in the American West. In 1879, four such surveys were combined into a new agency called the U.S. Geological Survey (USGS). Today the USGS continues to serve the Nation as an independent fact-finding agency that provides scientific understanding about natural resources. Because of the striking similarities between the USGS mission and Thomas Jefferson's scientific charge to Lewis and Clark, the USGS can be seen as an organizational successor to Lewis and Clark.

With no regulatory or management mandates, the USGS serves the Nation as an independent fact-finding agency that collects, monitors, analyzes, and provides scientific understanding about natural resource conditions, issues, and problems. The value of the USGS to the Nation rests on its ability to carry out studies in the earth and life sciences on a national scale and to sustain long-term monitoring and assessment of natural resources.

## USGS participation

The goal of USGS participation in the Lewis and Clark Bicentennial Commemoration is to increase public awareness about the value of science in understanding the complex resource management issues that face the United States.

### USGS Map of Today

The digitally produced shaded-relief map to the left gives a much more detailed look of the same area mapped by William Clark. Elevation is represented as a range of colors, from dark green for low elevation to white for high elevations. For more information on the USGS National Map Data that was used to prepare this map, visit this web site: http://nationalmap.usgs.gov/

During the Bicentennial, the USGS will bring the natural science of Lewis and Clark's time and the science of today to the public through USGS exhibits at museums and visitor centers, by an extensive website emphasizing USGS science (http://www.usgs.gov/features/lewisandclark.html), by video presentations and electronic educational projects, and through USGS participation in the Federal *Corps of Discovery II*, a traveling classroom that will retrace the route of the Lewis and Clark expedition during the Bicentennial.

At numerous stops along the route, USGS scientists will give presentations about related ongoing USGS investigations, explaining changes in river systems and pointing out advances in scientific instruments and understanding that have occurred during the last 200 years. In particular, the results from an ongoing investigation of the changes in water quality of the lower Missouri and middle Mississippi Rivers over the last two centuries, cosponsored by the USGS and the U.S. Environmental Protection Agency, will be shared with the public attending the *Corps of Discovery II*. Also, look for USGS exhibits and scientists in activities at all of the Bicentennial Signature Events.

In cooperation with over 20 other federal agencies, the USGS has produced a special Lewis and Clark map, *Discovering the Legacy of Lewis and Clark*, that shows the location of the *Corps of Discovery* route from coast to coast. This map is available free of charge from many federal agencies and at Lewis and Clark commemoration sites across the nation.

The USGS has also prepared a commemorative Lewis and Clark map poster that portrays the 1814 map drawn by William Clark of previously unknown territory in contrast to a modern physiographic map of the same area, digitally constructed from remote sensing images, that accurately depicts the magnificent landscape features described by Lewis and Clark. This map poster, *Lewis and Clark: A Legacy of Science*, can be previewed online at the USGS website and ordered from USGS (1-888-ASK-USGS).

### Continuing the Legacy

Two hundred years later, the USGS, the Nation's largest earth science agency, carries on the legacy of surveying our natural heritage that began with Lewis and Clark. USGS scientists continue to map, measure, and monitor great river systems and the lands that border them. Although modern scientific tools, such as seismic monitoring devices and remote sensing, are far more sophisticated than those employed by Lewis and Clark, the spirit of dedication and sense of discovery remain the same. In surveying natural resources and applying scientific knowledge to the land, the USGS continues what Lewis and Clark began. Find out more about the USGS at our website (http://www.usgs.gov).

Original drawing by Jim Adams courtesy of L&C Replicas, Butch Bouvier, Onawa, IA


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For USGS Lewis and Clark science, events, and activities, visit http://www.usgs.gov/features/lewisandclark.html.