



NEWS RELEASE

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Lewis and Clark slip through climatic window to the West

ATLANTA -- They hadn't planned it, but Meriwether Lewis and William Clark picked a fine time for a road trip when they set out to find a water route across the American Northwest two centuries ago.

Leading a small group of explorers, known as the Corps of Discovery, Lewis and Clark experienced favorable climatic conditions from 1804 to 1806 in search of an inland "Northwest Passage," according to a Georgia State University professor.

The timing of the trip was crucial because had the pair embarked just a few years earlier or later, the results of the journey – and subsequent U.S. expansion into the West – might have altered the historical outcome.

"Although the Corps of Discovery did have a few weather setbacks, such as a wet winter at Ft. Clatsop and some deep snowpack on their return trip, overall they traveled across the new frontier at an opportunistic time – four years after and two years before a major drought," says Georgia State University geography professor Paul A. Knapp. "Had the expedition encountered such a drought, their journey might have been significantly different."

"The Corps of Discovery suffered tremendously from want of food and a balanced diet," says Knapp. Even during an ideal climatic window, food was sometimes painfully scarce -- and nowhere was the problem more acute than when crossing the Lolo Trail in the fall of 1805. According to the travelers' journal entries, some days the group ate little, if anything. Drought conditions would only have made things worse. Wild game, the group's daily staple, would have been harder to find, as would berries and roots, he says.

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Likewise, rivers and streams would have been shallower during a drought, slowing travel along some routes. Lewis and Clark paddled, pulled and poled their canoes up rivers, the principal means of hauling supplies to the Continental Divide, says Knapp. An already daunting task, low water levels would have made the voyage much more difficult.

Had drought conditions prevailed, the Corps might not have crossed the Lolo Trail as soon as they did. Instead, the explorers would have been forced to spend fall, winter and spring east of the Columbia River drainage, Knapp says.

“As it was, they had a difficult time crossing the trail near the end of the crossing season. Had there been a drought, they most likely would not have arrived at the Pacific Ocean in the fall of 1805. Rather, they would have wintered east of the Columbia River drainage, taxing their supplies and increasing their chances of misfortune,” Knapp says.

“I’m not sure we will ever fully know what would have happened had the expedition traveled during an intense drought, but we do know that they traveled during a climatic period that favored their success,” he says.

Knapp’s research on the climatic conditions of the Lewis and Clark expedition is featured in the September issue of the *Bulletin of the American Meteorological Society*. The AMS (<http://www.ametsoc.org/ams>) is the nation's leading professional society for scientists in the atmospheric and related sciences.

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Note to Editors and Assignment Desks: PDF or faxed copies of the paper, "Window of Opportunity: The Climatic Conditions of the Lewis and Clark Expedition of 1804-1806" are available to journalists from **Stephanie Kenitzer**, AMS press office, at 425/432-2192, or kenitzer@dc.ametsoc.org

The September Bulletin of the American Meteorological Society includes another paper about Lewis and Clark’s meteorological observations entitled “Lewis and Clark: Pioneering Meteorological Observers in the American West.” Contact Stephanie Kenitzer for a copy.