We Proceeded On

Rediscovering Ralph DeCamp, artist
& photographer of the L&C Trail
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letters: <em>U.S.N.S. Lewis and Clark</em>; Spirit Mound; Patrick Gass</td>
<td>2</td>
</tr>
<tr>
<td>President’s Message: Partnership and trail conservation</td>
<td>4</td>
</tr>
<tr>
<td>Bicentennial Council: Looking for “wildness” on the L&amp;C Trail</td>
<td>6</td>
</tr>
<tr>
<td>Trail Notes: Opportunities for rediscovery and renewal</td>
<td>8</td>
</tr>
<tr>
<td>Charles Willson Peale</td>
<td>10</td>
</tr>
<tr>
<td>The Philadelphia artist, naturalist, and impresario did much to preserve the expedition’s legacy</td>
<td></td>
</tr>
<tr>
<td>By Marc Chalkley</td>
<td></td>
</tr>
<tr>
<td>“Specimine of the Stone”</td>
<td>17</td>
</tr>
<tr>
<td>Contrary to the traditional historical view, Lewis and Clark were active and diligent geologists throughout the expedition</td>
<td></td>
</tr>
<tr>
<td>By John W. Jengo</td>
<td></td>
</tr>
<tr>
<td>Landscapes Preserved for History</td>
<td>27</td>
</tr>
<tr>
<td>The Lewis and Clark paintings and photographs of Montana artist Ralph Earll DeCamp</td>
<td></td>
</tr>
<tr>
<td>By Jill Carlson Jackson</td>
<td></td>
</tr>
<tr>
<td>Reviews</td>
<td>34</td>
</tr>
<tr>
<td>Two new collections of L&amp;C essays; In Brief: <em>One Vast Winter Count; Venereal Disease and the Lewis and Clark Expedition; The Lewis and Clark Trail: Yesterday and Today</em></td>
<td></td>
</tr>
<tr>
<td>Dispatches</td>
<td>38</td>
</tr>
<tr>
<td>Comparing L&amp;C’s speeches to the Otos and Yankton Sioux</td>
<td></td>
</tr>
<tr>
<td>By George Berndt</td>
<td></td>
</tr>
<tr>
<td>Chapter News</td>
<td>40</td>
</tr>
<tr>
<td>Flathead Chapter organizes L&amp;C “welcome”</td>
<td></td>
</tr>
<tr>
<td>By Wendy Raney</td>
<td></td>
</tr>
<tr>
<td>Soundings</td>
<td>44</td>
</tr>
<tr>
<td>Rethinking Toussaint Charbonneau</td>
<td></td>
</tr>
<tr>
<td>By H. Carl Camp</td>
<td></td>
</tr>
</tbody>
</table>

On the cover
Painted a century ago, Ralph Earll DeCamp’s *The Heart of the Gates of the Rocky Mountains* is one of two of his landscapes found in Olin D. Wheeler’s *The Trail of Lewis and Clark* (1904), the first travelogue of the expedition’s journey across the West. DeCamp, a Montana artist best known for his landscapes of Big Sky country, also took many of the photographs in Wheeler’s two-volume work, and he drew all of its maps. Jill Carlson Jackson profiles this underappreciated graphic chronicler of Lewis and Clark in a story beginning on page 27. Painting reproduced courtesy of Thomas and Jane Petrie.
The good ship Lewis and Clark takes to the water

I was privileged to attend the launching, on May 21 in San Diego, of the U.S.N.S. Lewis and Clark (T-AKE-1). Constructed by the National Steel and Shipbuilding Company (NASSCO), it is the first in a class of at least eight supply ships that will be crewed by the Merchant Marine. The Lewis and Clark and others in its class will carry food and ammunition to re-supply U.S. Navy combat ships. The next ship in the class will be named the U.S.N.S. Sacagawea. The other ships will also be named for explorers.

Jane Lewis Sale Henley, a collateral descendant of Meriwether Lewis and a former president of the LCTHF, and Lisa Clark, a great-great-great-great granddaughter of William Clark, were the ship’s sponsors. They were two of many Lewis and Clark relatives in attendance.

The day before the launching, family members were invited on a tour of the ship. As part of the occasion, Lisa’s dad, Peyton C. “Bud” Clark, and Jane Henley read from the Lewis and Clark journals for May 20, 1805. After the tour, we enjoyed dinner, dancing, and a chance to meet some of the NASSCO employees who worked on the ship.

The Lewis and Clark is huge—689 feet long, 105 feet wide, and displacing 41,000 tons. The Corps of Discovery’s keelboat could have fit in one storage compartment!

The launch took place at sundown to take advantage of the highest tide of the year. Jane and Lisa did a wonderful job christening the ship—both broke their bottles on the first swing, showering the hull with champagne. Bedecked with red, white, and blue bunting and trailing streamers and balloons from its superstructure, the ship moved swiftly down the incline into San Diego Bay. A display of fireworks followed.

Nearly six thousand people were present at the festivities. Many V.I.P.s were on hand, including, appropriately, Congressman Jerry Lewis and Admiral Vern Clark. (Lewis is a Republican from Pennsylvania and chairman of the House Appropriations Committee, and Clark is Chief of Naval Operations; neither is related to the explorers.) Also in attendance were Congressman Randy “Duke” Cunningham (R., Calif.), Vice Admiral David L. Brewer III, Rear Admiral Charles S. Hamilton II, Assistant Secretary of the Navy John J. Young, Jr., NASSCO President Richard H. Vortmann, and the captain of the new ship, Terry Ryenga.

At the post-launch reception Jane and Lisa presented their gifts to the ship—prints of artist Gary Lucy’s painting of the expedition’s keelboat and Michael Cunningham (R., Calif.), Vice Admiral David L. Brewer III, Rear Admiral
Columbia River Gorge 1/3 sq.
This ad is a PDF - it is included in the “8/05 art & ads” folder. Make sure it prints out so the text, display type, and illustration are in focus (no “jaggies”).

Advertise your L&C products and services in WPO!

AD RATES
Inside front or back cover:
Black & white, $650; color, $750
Outside back cover:
Black & white, $800; color, $900
Inside pages (black & white):
Full page: 7 1/4 X 9 1/2 $600
2/3rd vertical: 4 3/8 X 9 1/2 $400
1/2 horizontal: 4 3/8 X 7 1/4 $300
1/3rd square: 4 3/4 X 4 3/8 $200
1/3rd vertical: 2 1/4 X 9 1/2 $200
1/6th vertical: 2 1/4 X 4 3/8 $100
1/12th: 2 1/4 X 2 3/16 $50

Address inquiries to Karen Rickert,
P.O. Box 3434, Great Falls, MT 59403. 406-454-1234/fax: 406-771-9237. krickert@lewisandclark.org.

We Proceeded On
(Back issues, 1974 - current)
All back issues of our quarterly historical journal are available. Some of the older issues are copier reproductions. Orders for a collection of all back issues receive a 30 percent discount. Order your missing issues to complete your set. Call 1-888-701-3434 or order online at www.lewisandclark.org.

$5 copier reproductions
$10 originals
$2 shipping & handling

August 2005 We Proceeded On 3
The importance of partnership in trail conservation

Thousands of eager visitors converged during June and early July in Great Falls, Montana, to participate in the National Signature Event “Explore Big Sky.” The event planners excelled in presenting a program balanced with scholarship, diversity, education, and entertainment.

In the vast openness of the Montana landscape one can still glimpse, here and there, portions of the L&C Trail that appear little altered by human activity. Yet most of the route followed by the explorers would be scarcely recognizable to them today. To ensure the legacy of the expedition, all who are passionate about Lewis and Clark must adopt the mantra of responsible stewardship. Thanks to the extensive work of contemporary historians, we can at least be confident that the basic history of the expedition is accurately told and easily available to all. It is important that we accord equal attention to the trail—the expedition’s physical legacy. If we fail in its stewardship, any account of the Lewis and Clark tricentennial might begin with the statement, “Once upon a time there was a landscape we can no longer even imagine.”

LCTHF’s critical role

The Lewis and Clark Trail Heritage Foundation needs to renew and expand its commitment to trail stewardship and work aggressively to ensure responsible preservation, restoration, and (where necessary) development.

One of the bicentennial’s most significant contributions has been the creation of important partnerships among federal, state, and local governmental agencies. In the past year, the foundation and these agencies have engaged in numerous conversations. In all our discussions a major fact has emerged: The LCTHF is widely regarded as the sole national organization with the ability, know-how, and desire to provide leadership in the critical area of trail stewardship.

In coming months the foundation will be working with the National Park Service, Bureau of Land Management, Forest Service, Army Corps of Engineers, U.S. Geologic Survey, and Council of State Advisors to better delineate areas of possible cooperation. We expect to identify many opportunities for foundation chapters and members who want to participate in “on-site” trail projects. By embracing this trail initiative, we can truly fulfill our mission as “Keepers of the Story, Stewards of the Trail.”

—Gordon Julich
President, LCTHF

Columbia Signature Event

“Destination: Pacific,” the next in a series of 15 Signature Events marking the three-year-long Lewis and Clark Bicentennial, will be held November 11-15 at venues at the mouth of the Columbia River, including Astoria and Sunset Beach, Oregon, and Long Beach and Chinook County Park, Washington. The five-day program will feature the presentation of scholarly papers, the performance of period music, the dedication of the new Fort to Sea Trail linking L&C-related sites on both sides of the Columbia, and a commemoration of the “vote” cast by members of the Corps of Discovery at Chinook Point on November 14, 1805, about where to make winter camp.

The four remaining Signature Events will be held in 2006 in Idaho, Montana, North Dakota, and Missouri. Additional information on all of them can be found on the LCTHF Web site http://www.lewisandclark.org/?p=sig_events&n=bicentennial.
Gib Floyd
(Idaho Woodcraft)
pickup 5.05,
inside back cover

South Dakota Tourism
Looking for “wildness” in the wake of Lewis & Clark

Two hundred years ago Lewis and Clark moved through a country unknown to them and to most Euro-Americans. Of their many experiences and “discoveries” along the trail, we are well informed. But perhaps we are not so well informed about a concept they were discovering for themselves, a notion of wildness that we these centuries later are beginning to envision for ourselves.

Not wilderness. Wilderness is a place. In many areas of the planet wilderness places are protected, and should be, from disastrous human encroachment— but that very protection represents an intrusion of human activity. Thus wilderness is an artifact, a museum for recalling how things used to be.

I have seen the Missouri River from nearly one end to the other. In so many spots it is beautiful, powerful, full of stories distant from our time and experience; but the Missouri too is an artifact, damned and channeled and protected beyond its original nature. Humans have declared its value and either changed it or by their own choice left it alone. It is not the wild and free river that Lewis and Clark followed and from it learned the meaning of wildness.

Wilderness as artifact
I know what an artifact is; I’ve worked in museums my whole life. The expedition’s elk-skin journal, Clark’s watch-fob compass, Lewis’s telescope: these are more obvious artifacts. But the places we have known as Wilderness—Old Faithful in Yellowstone, Alaska’s Denali National Park, the Mark Twain National Forest—these too manifest the agency of human work, which is the dictionary definition of artifact.

About one hundred years after Lewis and Clark trekked across Montana, Charles M. Russell was there, conjuring up images of the mythical Old West. He painted a gorgeous picture he titled *When the Land Belonged to God.* In the early morning, or perhaps it was at sunset, a herd of buffalo, wild and free, emerged over a steep hill from the river below. The pristine landscape shows no sign of humans, Indian or cowboy or rancher. It is a landscape Russell never saw, nor will we.

Lewis and Clark walked into wildness, and through their eyes I have walked through it too. I have learned that wildness is a quality we have lost and that our common future depends on our ability to reclaim it. We cannot return to the world Lewis and Clark experienced, nor should we. We cannot undo what has been done even if we wanted. However, we need to learn that wildness is essential, that place matters, that we have the obligation to recognize that we are part of this earth. We must redefine our relationship with our planet, with other life on it, and with each other. Nature is not somewhere else. It is not on the Heritage Trail or even the Yellowstone River, which is the longest free-flowing, undammed river in the country as it makes its way east through Montana to the North Dakota border. The quality of wildness is in each of us, as Wallace Stegner described in his “Wilderness Letter”:

We are a wild species, as Darwin pointed out. Nobody ever tamed or domesticated or scientifically bred us. But for at least three millennia we have been engaged in a cumulative and ambitious race to modify and gain control of our environment, and in the process we have come close to domesticating ourselves. Not many people are likely, any more, to look upon what we call “progress” as an unmixed blessing. Just as surely as it has brought us increased comfort and more material goods, it has brought us spiritual losses . . . . One means of sanity is to retain a hold on the natural world, to remain, insofar as we can, good animals. Americans still have that chance, more than many peoples; for while we were demonstrating ourselves the most efficient and ruthless environment-busters in history, and slashing and burning and cutting our way through a wilderness continent, the wilderness was working on us. It remains in us as surely as Indian names remain on the land. If the abstract dream of human liberty and human dignity became, in America, something more than an abstract dream, mark it down at least partially to the fact that we were in subdued ways subdued by what we conquered.

Lewis and Clark moved into a landscape they did not control or dominate. They met people who held the landscape sacred and accepted their place in it. The men of the expedition learned to live in this world, a world we cannot fathom, for our world is manmade and we control or hope to control it. But then the tsunami comes. The volcano erupts. Tornadoes and hurricanes swirl upon us. The thunder rolls, wild flowers grow without our assistance, and babies are born in nature’s time, not ours. Then we know we live on a wild planet.

—Robert R. Archibald
President, Bicentennial Council
St. Joseph
pickup 5.05,
page 9
E ach of us has a unique opportu-
nity to discover the Lewis and
Clark National Historic Trail. Its
land and water are constantly chang-
ing and its history is continuously be-
ning written and revised.

Members of the Corps of Discov-
ery were not the first to learn of the exis-
tence of the plants, animals, people,
water routes, or walking paths encoun-
tered on their journey to the Pacific.
Lewis and Clark did not “discover” the
rivers, the birds, or the mountains
named for them and members of their
party. What they saw was new to them,
but it was not unknown.

American Indians already knew the
plants. They knew their uses as food,
medicine, tools, and construction mate-
rials. They had a spiritual connection
with the animals. They ate many species and
used them for clothing, shelter, and tools.
The Indians possessed a profound
knowledge of the life around them.

Indians understood the waters and
pathways that led them to hunting
grounds and neighboring villages and
provided safety and sustenance. Lewis
and Clark did not discover their route
to the Pacific Ocean. Every part of it
had been traveled for generations.

Indians were familiar with the
plants, animals, water, and land in ways
Lewis and Clark could not imagine.
These things were, however, unknown
to members of the expedition and so
became their own personal discover-
ies. They shared these discoveries with
others in new and exciting ways.

They sketched detailed, accurate im-
ages of animals and plants. They re-
corded animal movements and
behavior, com-
pared and con-
trasted Indian
tribes, measured distance and calcu-
lated time, drew thorough maps, col-
lected samples, and composed
comprehensive reports of their findings in
their journals.

Their journals present a picture of
what the landscape looked like 200
years ago and describe the people
and animals that inhabited the land. They
allow us the opportunity to reflect on
two centuries of change and rediscover
for ourselves what Lewis and Clark
preserved so meticulously in writing.

If you have never seen the headwa-
ters of the Missouri River or its
confluence with the Platte River, you
can explore them for yourself. You can
photograph Lewis’s woodpecker or
Clark’s nutcracker, sketch a cotton-
wood, or taste a chokecherry. You can
learn the history and culture of an In-
dian tribe along the trail or visit a small
community to learn of the trail’s role
in its history.

A 12-year-old in Montana recently
discovered a new species of moss while
on a school field trip, demonstrating
that significant discoveries are yet to be
made.

Last summer, author and botanist
Wayne Phillips found five plants that
Lewis and Clark identified in their jour-
als in a single tipi ring on the Black-
feet Indian Reservation, in northwest-
er Montana. For him, this was an ex-
citing discovery.

Volunteers on the Lolo Motorway
last summer found a wolf’s large
pawprint and were awestruck by the
impressive size of an animal they never
actually saw.

The trail may not look the same as it
did 200 years ago, but most of what
Lewis and Clark described can still be
found. Prickly pear is prevalent, blue
flax is visible on hillsides and in gardens,
and grizzly bears are regularly spotted
by hunters and hikers. Quiet places re-
main along the Missouri and Colum-
bia rivers, and hiking trails in the Rocky
Mountains hint at the difficulty the ex-
plorers had crossing those mountains
in 1805 and 1806.

The best way to understand the jour-
nals of expedition members is to place
yourself in their footsteps. There are
opportunities to explore and make dis-
coveries all along the trail. You can do
your own part to preserve history by
sharing stories of your exploration,
keeping a journal, taking photos, or
drawing pictures of what you find.

The trail belongs to us all. Become
a part of its history by embarking on
your own journeys of exploration and
sharing your discoveries.

—Wendy Raney
Director, Field Operations

L&C Trail offers a continuing opportunity for rediscovery and renewal

L&C in other journals: Thwaites, Mackenzie, angling

A biographical sketch by Matt Bless-
ing of Reuben Gold Thwaites, the edi-
tor of the first definitive version of the
Lewis and Clark journals, appears in
the Winter 2004-2005 Wisconsin Maga-
zine of History (www.wisconsinhis-
tory.org/wmh).

David J. Nicandri’s “Lewis and
Clark: Exploring under the Influence
of Alexander Mackenzie,” in the Fall 2004
Pacific Northwest Quarterly, ex-
amines the literary influence of the
Canadian explorer’s book Voyages
from Montreal on the captains’ jour-
als. (Among the author’s findings:
Lewis’s reference to the expedition as
his “dar(l]ing project” was almost cer-
tainly borrowed from Mackenzie.)

Seanaid Campbell writes about
the expedition’s anglers in “Fishing the
Journals of Lewis and Clark,” appear-
ing in the Winter 2005 Flyfisher, the
magazine of the Livingston, Montana-
based Federation of Fly Fishers
(fedflyfishers.org). “A Different Angle
on the Expedition,” an article by Nick
Gevock in the May–June 2005 Montana
Outdoors, also looks at L&C fishing.
Gevock notes that the expedition re-
corded 11 new species of fish and that
fish supplemented the expedition’s diet
when game was scarce. (http://fw.
state.mt.us/moutdoors/HTML/A-
ticles/2005/LCFishing.htm.)
THE MYSTERY OF LOST TRAIL PASS

A Quest for Lewis and Clark’s Campsite of September 3, 1805

WPO Supplementary Publication
$12, plus $3 shipping

Lost Trail Book / P.O. Box 3434
Great Falls, MT 59403
1-888-701-3434

THE MYSTERY OF LOST TRAIL PASS

A Quest for Lewis and Clark’s Campsite of September 3, 1805

WPO Supplementary Publication
$12, plus $3 shipping

Lost Trail Book / P.O. Box 3434
Great Falls, MT 59403
1-888-701-3434

FULL-COLOR PRINTS

Uniforms and dress of the Corps of Discovery, by artist
MICHAEL HAYNES

EXPLORATIONS INTO THE WORLD OF LEWIS & CLARK

Edited by Robert A. Saindon

194 articles from WPO
3 volumes, 1,493 pages
$79.85 paper

Order from
Digital Scanning, Inc.
(888-349-4443; www.digitalscanning.com)
In Philadelphia in the spring of 1807, Meriwether Lewis sat for a portrait and posed for a wax figure, both created by Charles Willson Peale. Lewis, a national hero who the previous fall had returned from his epic journey to the Pacific, was just 32 years old and in the prime of life. Peale—a celebrated portraitist, naturalist, inventor, and founder of the nation’s most popular museum—was 66 years old, a Methuselah by the day’s standards. Neither could possibly have imagined that the aging artist would long outlive his vigorous young subject, whose life would soon spiral out of control, leading to a mysterious death (almost certainly a suicide) a mere two and a half years later.

This image of the two men in the artist’s studio offers a glimpse of the complex connections between the Voyage of Discovery and Peale, a restless genius whose contributions to art and science both fostered and drew inspiration from the achievements of Lewis and Clark.

Although a member of Philadelphia’s intellectual elite and one of Thomas Jefferson’s regular correspondents, Peale was not among those who directly planned the transcontinental exploration with the nation’s third president. He was neither a frontier-oriented Virginian like Lewis or his cocaptain, William Clark, nor a politician ambitious to enlarge U.S. sovereignty, like James Madison and Albert Gallatin, both members of Jefferson’s cabinet. But Peale, whose interests were varied and voracious, was a vital participant in the social, political, and scientific evolution of the post-revolutionary United States. As such, he exercised a major influence on the Enlightenment atmosphere that engendered the western expedition.

PEALE’S EARLY YEARS AND THE BIRTH OF HIS MUSEUM

Like Benjamin Franklin and many others in his circle, Peale came from humble roots. He was born in Chestertown, Maryland, in 1741, the son of an English émigré and convicted forger given the choice of hanging or moving to the Colonies. Peale apprenticed at age 13 to a saddler in Annapolis, a trade he abandoned by his early twenties for portrait painting.
Charles Willson Peale was 81 years old when he painted his famous self-portrait, *The Artist in His Museum*. The view is of the Long Room.
The fledgling artist was an engaging young man with a knack for making friends with influential people. While living in Boston for a time, he honed his skills at the elbow of the distinguished portraitist John Singleton Copley. Friends thought enough of his talents to raise money to send him to England for further study. In London he met Franklin, whose connections as a colonial agent helped land Peale a job as an assistant to the court portraitist Benjamin West.

Peale returned to Maryland in 1769. In the words of Joseph Kastner, a chronicler of the nation’s early naturalists, he was now “a sure-handed professional: a good draftsman, a fine colorist, a sharp reader of personality and a persuasive salesman.” He soon established himself as a successful portraitist whose list of clients included George and Martha Washington and other members of America’s elite.

In 1776 Peale moved to Philadelphia. The Continental Congress was in session there, drafting the Declaration of Independence. Caught up in the revolutionary spirit, Peale joined the militia and went on to distinguish himself as an officer at the battles of Trenton, Princeton, and Germantown. While enduring the hard winter at Valley Forge he painted the 19-year-old Marquis de Lafayette, one of many portraits he would execute of the Revolution’s leaders.

After the war, copies of many of these paintings hung in Peale’s home and studio at Third and Lombard streets, in Philadelphia. This gallery of national heroes was open to an admiring public and became the genesis of Peale’s Museum. But what really attracted people’s attention were some bones of a mastodon acquired by the artist in 1783.

The bones had come from Big Bone Lick, a swamp in Kentucky rich in mammalian fossils. A German naturalist named Christian Friedrich Michaelis had unearthed the remains of the extinct elephant and had commissioned Peale to draw them.

The nascent showman knew a good thing when he saw it. Within two years, Peale had turned part of his house into “a repository for natural curiosities, the wonderful works of nature.” Visitors paid an admission fee of 25 cents. On display were minerals, soils, seashells, and an astonishing variety of stuffed animals, birds, and fish realistically posed in natural settings; such “habitat arrangement”—the placing, according to historian Paul Russell Cutright, of “mounted specimens in front of backgrounds painted to create the illusion of an actual, natural environment,” predated by a century the dioramic displays common to museums today. “Mr. Peale’s animals reminded me of Noah’s Ark,” one visitor noted, “but I can hardly conceive that even Noah could have boasted a better collection.” In an adjacent menagerie the museum also displayed live animals, including a bear, a rattlesnake, and a five-legged cow with six feet and two tails.

Peale had taught himself taxidermy and did most of the mountings himself. He continued to gather specimens while touring the country painting portraits and solicited them from a wide circle of American and European correspondents. Among the donors were Robert Patterson, Meriwether Lewis’s tutor in celestial navigation, who gave him a paddlefish, and George Washington, who forwarded a pair of golden pheasants.

The museum eventually outgrew Peale’s house. In 1794 it moved to the American Philosophical Society (A.P.S.) and in 1802 to the Pennsylvania State House, known today as Independence Hall, where the crowning exhibit was a fully articulated skeleton of what was thought at the time to be a mammoth—it was actually a mastodon—discovered the year before on a farm in Newburgh, New York. Peale’s excavation of the remains was underwritten by the A.P.S. and partly outfitted by the War Department, which on orders from President Jefferson supplied it with pumps and tents.

Peale’s devotion to the twin pillars of art and science is reflected in some of the names he gave his children. Four sons and three daughters by his first wife were all named for artists (two, Raphaëlle and Rembrandt, became distinguished painters in their own right). He named a son by his second wife Charles Linnaeus Peale, in honor of the Swedish naturalist who gave us our system for
classifying species.13 (The thrice-widowed Peale married three times and fathered 17 children, of whom 10 lived to adulthood.)

PEALE’S RELATIONS WITH LEWIS AND JEFFERSON

Meriwether Lewis arrived in Philadelphia in May of 1803 to outfit his expedition. One of its primary goals was the advancement of science, so he was also there to learn as much as he could about natural history from the city’s savants. Although there is no record of his doing so, Lewis must have met with Peale and visited his museum to see its famous mammoth.

Writing have laughed up their scholarly sleeves at Jefferson’s urging Lewis to look for mammoths in the West. But the notion of evolution and the extinction of species wouldn’t gain currency until later in the century, and it was assumed mammoths and other large mammals known from the fossil record must still exist somewhere—perhaps in the farther reaches of the country that Lewis would soon explore. Lewis took off precious time later that fall, while descending the Ohio River, to investigate reports of a mammoth skeleton found at Big Bone Lick and report to Jefferson about it.11 Both he and Clark paid particular attention to any fossil remains found on the expedition. Arguably, none of this would have come about without Peale’s mammoth, which fired the scientific curiosity of Jefferson and his protégé.

Peale and Jefferson were intellectual allies in the effort to refute arguments of the Comte de Buffon, a famous French naturalist, that North America’s climate tended to produce degenerate and reduced forms of wildlife and humans; the Newburgh mammoth became an important piece of evidence in their rebuttal.

The artist and the sage of Monticello corresponded avidly about natural history and other topics. Both had a penchant for mechanics. Peale was an early user of the polygraph and promoted it to Jefferson. This wasn’t the unreliable “lie detector” beloved of Texas employers and F.B.I. interrogators, but an ingenious device for copying handwritten letters. It worked by means of a slender arm, attached to the writer’s pen, which guided a second pen that traced an identical text. Invented by Peale’s friend John Hawkins, it was quickly embraced by the artist, who refined and improved it. Jefferson, who came to rely on it as a way of keeping track of his prolific correspondence, later said he “could not . . . live” without his polygraph.12

The polygraph was just one of many side interests for the artist, whose “world in miniature”—Peale’s Museum—remained his consuming passion. Jefferson, who had been an early supporter of the museum and had lobbied unsuccessfully for the government to adopt it as a national institution, fully shared his friend’s enthusiasm and made the museum the official repository of the expedition’s scientific treasures.13 In the spring of 1805, Lewis shipped Jefferson a harvest of biological specimens and Indian artifacts from Fort Mandan, on the upper Missouri. The trove included skins and skeletons of the pronghorn antelope as well as a live prairie dog and American magpie, all animals new to science.14 In the president’s mind, observes Kastner, “there was never any question” about where the specimens would go: “to Jefferson’s good friend, the artist-patriot-naturalist-impressario Charles Willson Peale, for display at Peale’s Museum of Philadelphia, the country’s only working natural history museum where tens of thousands of Americans were given a serious introduction to natural science.”15

Many more treasures followed upon the expedition’s return. The museum housing Lewis and Clark’s specimens grouped exhibits according to Linnaean principles and identified the plants and animals displayed by their corresponding Latin binomial names. It comprised four rooms, or halls, devoted respectively to mammals (“quadrupeds”), birds, reptiles and fishes, and Indian artifacts. The two hundred species on view in the Quadruped Room included the pronghorn antelope sent from Fort Mandan and a big-horn sheep collected later on the expedition. The Long Room housed more than a thousand bird specimens as
Peale’s involvement came to naught.

PEALE’S INFLUENCE ON OTHERS

In his long life—he died in February of 1827, a few months shy of his 86th birthday—Peale was a mentor to many younger men, among them Alexander Wilson, a lonely Scottish immigrant who figures in the Lewis and Clark story. Wilson wrote and illustrated American Ornithol-
ogy, a nine-volume work that was the first comprehensive treatment of the nation’s birdlife. A former peddler and sometime poet, Wilson arrived penniless in Philadelphia in 1794. He found a job teaching school and was befriended by a kindred spirit, the naturalist William Bartram, whose “garden” on the west bank of the Schuylkill was a nursery for native plants collected on his wide-ranging botanical excursions. It was there, in 1802, that Wilson by chance met Peale and his son Rubens. They were collecting—that is, shooting—birds to display at the museum, and Wilson protested their killing of a favorite cardinal. Despite this somewhat inauspicious beginning, Peale and Wilson struck up a lasting relationship. Wilson had only recently turned to the serious study of birds, and Peale encouraged his ornithological ambitions.  

In 1811, Wilson wrote an invaluable account of Lewis’s death based on his interview with the proprietor of the Tennessee roadhouse where he had died of gunshot wounds.  

Another man drawn into Peale’s orbit was the artist George Catlin. A native Pennsylvanian who in 1823 abandoned a law career to study art in Philadelphia, Catlin was a friend of Rembrandt Peale. His exposure both to the western artifacts in Peale’s Museum and the artist’s portraits helped convince him of his own mission in life: to document in paint the native peoples of the West. He journeyed to St. Louis in 1830 and with the help of William Clark traveled up the Missouri. Catlin painted Great Plains chiefs who had greeted Lewis and Clark a quarter-century before, and the images he has left us offer a rare glimpse into tribal cultures that would soon vanish.

“ICONIC” PORTRAITS

The most direct and lasting of Peale’s contributions to the legacy of Lewis and Clark are his portraits (above) of the explorers themselves. As the best portraits always do, while faithfully rendering their subject’s outward features they also capture their personalities (even, perhaps, something of their souls).

Studying Peale’s Lewis, we see a man who is confident and intense but detached, his eyes focused on the far—or is it inward?—distance. Clark, by contrast, looks directly at the artist; he seems as interested in the painter as the
painter is in him. His grave lips appear on the verge of a smile.

Lewis and Clark have been called icons, a word that in its primary sense refers to a painting or statue of a holy person, an object of otherworldly devotion. Peale’s portraits, which have probably been reproduced more than any other likenesses of the explorers, are “iconic” only in the secondary sense of their representativeness. The men portrayed are knowable, real, and decidedly down-to-earth.

Charles Willson Peale was neither a planner of nor participant in the Voyage of Discovery. Yet, inspired by that epic journey, he stimulated others to carry forward its work, and he played an important role in preserving its achievements for future generations.

Foundation member Mark Chalkley lives in Baltimore. He wrote about John Pernier in the November 2004 WPO.

Notes
2 Kastner, pp. 146, 158.
3 Ibid., p. 148.
4 Cutright, p. 352.
5 Kastner, p. 148. The person quoted is Manassah Cutler, a Massachusetts naturalist.
6 Kastner, p. 149.
7 Cutright, p. 351.
8 Kastner, pp. 150–154; Cutright, p. 351. The specimen was thought at the time to be a mammoth. Mastodons were smaller than mammoths.
9 Kastner, p. 156.
10 Ibid., p. 149.
12 Robert Plate, Charles Willson Peale: Son of Liberty, Father of Art & Science (New York: David McKay, 1967), p. 118. The author does not give the source of Jefferson’s letter. Jefferson also used the wet-copy process to duplicate his letters. This involved laying a damp sheet of paper on the original to absorb a tracing of the ink, but the resulting copy was often smudged and faint.
13 Cutright, p. 392.
15 Kastner, p. 143.

Peale’s renderings of four specimens collected by Lewis and Clark and displayed at his Philadelphia Museum. Clockwise from top left: Clark’s nutcracker, mountain quail, horned toad, Lewis’s woodpecker.

17 Ibid., Vol. 1, p. 364.
18 Paul Russell Cutright, Contributions of Philadelphia to Lewis and Clark History (Philadelphia Chapter of the Lewis and Clark Trail Heritage Foundation, 2001), p. 29; Jackson, Vol. 1, p. 166. Lewis received word about his election to the A.P.S. in a letter from Jefferson dated January 22, 1804, when the expedition was at Camp River Dubois preparing to ascend the Missouri.
20 Ibid., Vol. 2, p. 469.
22 Kastner, p. 158.
23 Ibid., p. 157.
25 Cutright, Pioneering Naturalists, p. 383; Cantwell, p. 141. According to Cantwell, Lewis also put Wilson in touch with John Ordway, one of the expedition’s sergeants, who provided additional information about western birds. Many other expeditions found their way into American Ornithology, but the captains did not necessarily receive credit for their discoveries. Jackson attempts to sort all this out in a five-page footnote in Volume 2, pp. 292–298, but as he observes, “It is difficult to know exactly what species of birds and animals Lewis and Clark may be credited with discovering.”
26 For Wilson’s account, see WPO, February 2002, p. 24.
27 www.ready-to-hang.com/LCP_ArtNotes/George_Catlin_Bio.htm, downloaded May 23, 2005. Catlin in 1832 also painted a full-length portrait of Clark as the prosperous first citizen of St. Louis. A black-and-white image of this portrait can be seen on page 8 of the February 2001 WPO.
In the late afternoon of May 31, 1805, after another long and arduous day of struggling against the unremitting current of the Missouri River, Meriwether Lewis, William Clark, and the rest of the Corps of Discovery made camp at Stonewall (now Eagle) Creek in present-day Montana. The laborious work of hauling the canoes and pirogues upstream may have been achingly monotonous and familiar to the explorers, but the route they traveled this day had been a singular revelation. They were passing through a series of remarkable free-standing stone walls and brilliantly white sandstone cliffs, the inspiration for Lewis’s famed journal passage about “seens of visionary enchantment” and “most romantic appearance” describing the White Cliffs region of the Missouri.1 Yet the captains’ work on this memorable day was not over by any means. Intrigued by the extraordinary free-standing stone walls that rose on each side of the river, Lewis and Clark summoned the energy to have a closer look at these unique geological features, and not just because they desired to include more detail in their journals. Lewis and Clark were acutely aware that observations of the “mineral productions of every kind” were an essential part of the scientific mission that Thomas Jefferson had outlined for them two years before, but the captains had another objective in mind in the waning light of this late afternoon. As Clark wrote, “both Capt Lewis and My self walked on Shore this evening and examined those walls minutely and preserved a Specimine of the Stone.”2

Although not nearly as celebrated as their botanical and zoological work, Lewis and Clark collected a multitude of mineralogical specimens throughout the expedition. There are numerous places in the journals where it’s obvious the captains are collecting rock and mineral specimens. The best-known incident took place on August 22, 1804, when Lewis, attempting to assay a specimen, was overcome by what Clark assumed were fumes of arsenic or cobalt.3
Lewis’s incapacitation may have dampened the captains’ zeal for conducting such experiments, but it did nothing to deter them from continuing their collecting activities. Perhaps realizing their own limitations in the proper identification of rocks and minerals—still a very inexact science in the early 1800s—Lewis and Clark made the wise choice of dealing with mineralogy in the same way they did botany and zoology, by diligently collecting representative samples for shipment back East, where experts could make the proper descriptions and chemical analyses.

Lewis and Clark appear to have assembled at least three separate collections of rock, mineral, and fossil specimens during the expedition, not counting the special shipment of mammoth bones and teeth recovered from Big Bone Lick, Kentucky, that Lewis sent to Thomas Jefferson in the fall of 1803. The following discussion seeks to unravel the complicated collection history and ultimate fate of the captains’ mineral specimens. It addresses when each shipment of specimens arrived in the East, determining who received and described them, evaluating the accuracy of these descriptions, hypothesizing how the rocks and minerals fell into the hands of a private collector before transfer to the Academy of Natural Sciences (A.N.S.) in Philadelphia, reviewing which specimens survive to the present day, and assessing whether the captains’ mineralogical collection played a role in influencing scientific thought and the advancement of geology and mineralogy in the early nineteenth century.

**DONATED LOUISIANA TERRITORY SPECIMENS: FIRST SHIPMENT**

In early January of 1804, when the expedition was at Camp River Dubois, near St. Louis, Meriwether Lewis circulated a survey among the leading merchants and citizens of St. Louis inquiring about population, trade, agricul-
ture, natural history, and other matters relating to “Upper Louisiana,” the territory recently acquired from France by the United States. A number of questions deal with mineralogy. They ask, “What are your mines and minerals? Have you lead, iron, copper, pewter, gypsum, salts, salines, or other mineral waters, nitre, stone-coal, marble, lime-stone, or any other mineral substance? Where are they situated, and in what quantities found? ... Which of those mines or salt springs are worked? and what quantity of metal or salt is annually produced?”

These inquiries yielded at least 15 mineral specimens, which Lewis forwarded to Jefferson on May 18, 1804, two days before leaving St. Louis to meet Clark and the expedition at St. Charles, Missouri. The specimens were donated by Jean Pierre Chouteau, his half-brother René Auguste Chouteau, and Nicholas Boilvin, a French-Canadian trader and Indian subagent. The collection comprised a limited selection of minerals of concern to Jefferson; among these were nine samples of lead ore from the “Mine of Berton” (Mine à Burton, located some 60 miles southwest of St. Louis); lead ore from the bed of the Osage River; a salt concretion from a saline of the Osage Nation; and silver ore, lead ore, and a rock crystal from Mexico. Jefferson received these specimens in Washington, D.C., and forwarded them to naturalist and museum keeper Charles Willson Peale, in Philadelphia. Lewis’s efforts in procuring them confirms that documenting and collecting examples of the “mineral productions of every kind” from the Louisiana Territory was not simply an afterthought in Jefferson’s Instructions.

**FORT MANDAN SPECIMENS: SECOND SHIPMENT**

It’s possible that Lewis began his collecting of mineral specimens while still in the East, for at least one of the specimens sent back from Fort Mandan appears to date from November 22, 1803. Lewis also did some sporadic collecting in late May 1804, during the early phase of the journey up the Missouri, in the vicinity of the Femme Osage and Gasconade rivers, but it doesn’t appear he truly engaged in serious mineral collecting until he received a specimen of “granulated Spontaneous Salt” from the Otoes, perhaps during a council with the tribe held on August 3, 1804.

This gift from the Otoes may have reminded Lewis of his obligation to assemble a collection of representative mineral specimens. Whatever triggered the subsequent activity, the next six weeks would be the most productive collecting period for specimens he would later send back from Fort Mandan. On one day alone—August 22, 1804—he collected at least nine mineral specimens, followed the next day by at least six more. There was another flurry of activity between August 28 and September 1, when seven additional specimens were collected. Lewis appears to have skewed the collection to attractively interesting objects; there may have been at least 12 different specimens of pyrite, a.k.a. “fool’s gold,” along with other minerals such as salts, alum, and weathered limestone sediments whose chemical composition proved too difficult to identify conclusively in the field. Overall, Lewis attempted to ensure that the collection was representa-
The two surviving rock specimens from the Lewis and Clark Expedition are Seybert Collection No. 534 (“pumice stone,” at right) and ANSP 3916/ex Seybert Collection No. 535 (left), which was described by Lewis as “lava” (a volcanic rock) based on its twisted, ropey appearance, but it’s actually a piece of metamorphosed sedimentary rock. Although the captains consistently misidentified these types of rocks throughout the expedition, Lewis and Clark should be credited with disproving the belief that active volcanoes existed in the Louisiana Territory because they deduced the causal relationship between burnt coal beds and adjacent layers of baked and fused rock along the Missouri River.

tive of the geology encountered along the lower Missouri valley by including samples of salt, “petrefactions,” “carbonated wood,” a fossil fish jaw and fossil shells, flint, sand, clay, “slate,” chalk, sandstone, pebbles, “pumice,” “lava,” and lead ore.

Lewis assembled a collection of at least 67 mineral specimens from late 1803 through early 1805 and sent them back downriver with Corporal Richard Warfington and the expedition’s keelboat in April 1805.10 Included in the shipment were two of the Chouteau-donated specimens (Fort Mandan mineralogical specimen Nos. 27 and 29, from Mine à Burton), which Lewis had received prior to departing Camp River Dubois nearly a year before. Why Lewis included them is uncertain, since he had already provided Jefferson with equivalent specimens in the May 18, 1804, shipment of donated specimens.

A number of letters, particularly between Jefferson and Peale, document the Fort Mandan shipment’s progress and serve as evidence that the specimens reached Philadelphia.11 On November 15, 1805, the American Philosophical Society (A.P.S.) received “A Box of plants, earths and minerals, from Captain Meriwether Lewis, per Jefferson, who wishes … Vaughan and Seybert to examine the earths and minerals.”12 This statement refers to John Vaughan, secretary and librarian of the A.P.S., and Adam Seybert, a physician, gentleman-scientist, and Philadelphia’s leading mineralogy expert, who subsequently played a major role in the fate of the Lewis and Clark mineral specimens.13 The following day, Vaughan copied specimen descriptive notes, either from an original list or from the specimen tags themselves, into the donation book of the A.P.S. Seybert then added supplemental mineralogical comments augmenting Lewis’s original specimen descriptions.14 Lewis, during a visit to Philadelphia in the spring and summer of 1807, had access to the donation book, so it may be assumed he reviewed these transcriptions and was satisfied as to their accuracy.

**POST-APRIL 1805 SPECIMENS: THIRD SHIPMENT**

It is clear from the journals that mineral specimens were collected after the expedition left Fort Mandan on April 7, 1805. Evidence for this can be found in the previously mentioned entry of May 31, 1805, about collecting a “Specimine of the Stone” in the White Cliffs area of the Missouri, as well as from Lewis’s entry for June 26, 1805, which mentions the explorers’ plan to cache minerals at the Upper Portage Camp, above the Great Falls.15 Unfortunately, none of the mineral specimens collected after leaving Fort Mandan were accounted for by name in the list of items sent to Washington by Lewis following the expedition’s return to St. Louis. The list, however, mentions two boxes and a tin case holding “Various articles,” which could have included minerals.16 It is also possible that Lewis delivered the mineral specimens to Philadelphia in person in 1807.17 Or they could have been part of a shipment Lewis sent via New Orleans to Charles Willson Peale about the time he left on the journey that ended with his death, in Tennessee, on October 11, 1809. In a letter to his son dated November 17, 1809, Peale says that he had received “a number of Articles” from Lewis, including “some minerals.”18 In December 1809 Peale recorded in his museum accession book a long list of “Articles collected” by Lewis and Clark.19 Among the sundry items mentioned are “A number of Minerals,” presumably the same ones referenced in his letter of November 17.20 In January 1810, during a visit to Philadelphia, Clark mentions finding “a few Minerals” while searching “for the Materials left in this City by the late Govr. Lewis,
A “blank spot” in their thinking: conventional views of L&C as field geologists

[Lewis] paid little attention to potential mineral deposits, especially after leaving the Mandans. … [W]hen he entered the Rockies he hardly ever commented on rocks or minerals.


There was no reason during those drab weeks [descending the Columbia River] to ponder geology, about which they knew little.


The forbidding mountains, what forces made them, how the great canyons were cut, what ingredients were fused to make the craggy skyline—of these things Lewis and Clark had little to say. At the beginning of the expedition their journals had contained random observations on potentially useful mineral deposits, and a collection of rocks and minerals had been sent back with the keelboat. … But even here in the Rockies, where observations about the earth might have crowded the pages of the journals, they concentrated on plants and animals. It was a blank spot in Lewis’s thinking that he almost surely acquired from Jefferson.


As Lewis and Clark moved on up the Missouri they had less and less to say about minerals. The discovery of an increasing number of new and extraordinary plants and animals and stirring experiences with Indians diverted their attention from such lackluster objects as coal, limestone, and lead ore.


[B]eing vitally interested in ethnology, they [Lewis and Clark] forget geology altogether. From the Great Divide to the Pacific their journal entries contain virtually no geological descriptions. Those that do appear are worthless.


***

Historical commentary like the examples here fail to take into account the state of geological science in 1803. Geology as we know it was just emerging as a separate physical science, and it was decades away from the first discoveries of the astonishing processes behind the formation of a vast array of geological phenomena, from angular unconformities (unimaginably long gaps in the rock record) to volcanoes to the uplift of mountain chains whose summits are imbedded with marine fossils. Lewis could write at great length about the taxonomy of plants and animals because the relatively advanced state of botany and zoology gave him the intellectual framework and vocabulary to do so. It was the nascent state of geology, not deficiencies in the captains’ dedication or attention, that precluded similar efforts in the science of rocks and minerals.

—John W. Jengo

relative to our discoveries on the Western Tour.”

Neither Peale nor Clark states when on the expedition these minerals were collected, but as the following discussion attempts to show, some of them were almost certainly acquired after leaving Fort Mandan in April 1805.

THE FATE OF THE EXPEDITION’S MINERALOGICAL SPECIMENS

The expedition’s mineral specimens, which as noted reached Philadelphia in several shipments between 1805 and 1809, were ultimately acquired by the Academy of Natural Sciences and merged with its mineral collection.

Somewhere along the way whatever identifying tags they may have had were lost, along with knowledge of their provenance. Today, the one specimen in the A.N.S. collection we can definitively link to the expedition is the fossilized jaw of a fish, Sauropsephalus lanceformis, which retained its original expedition tag. (The jaw was found by Sergeant Patrick Gass on August 6, 1804.)

The A.N.S. came to possess the expedition mineral collection because at least 34 Lewis and Clark mineral specimens were acquired initially by Adam Seybert, the same
man tasked by Jefferson in November 1805 with examining the expedition specimens sent back from Fort Mandan. We know this because Seybert produced a hand-written catalogue, circa 1812, to accompany his large mineral collection; scattered throughout the list of nearly two thousand specimen notations are unmistakable references to the expedition, and the collector is listed as “Capt. Lewis.”23

We don’t know how or exactly when Seybert came to possess the Lewis and Clark specimens, but one possibility should be considered. Clark’s visit to Philadelphia in January 1810 came only two months after Peale received the shipment Lewis sent via New Orleans, but the mineral specimens were apparently unlabeled—Peale states that he “expected that he [Lewis] intended to have described them on his arrival here as I did not receive any letter with them.”24 Thus, it’s possible that Clark turned the collection over to Seybert in exchange for his expertise in identifying the specimens, with the hope that the results would be included in the proposed (but ultimately never published) scientific volume of the journals.25 Seybert was a particularly good choice because he was actively collecting minerals and was still reaping the benefits of nearly four years of study in Edinburgh, London, Paris, and Göttingen.26 Two years later, in 1812, when Seybert set aside the study of mineralogy to pursue business interests and also to serve in Congress, he sold his mineral collection to the newly established Academy of Natural Sciences.27

A review of Seybert’s circa-1812 list of expedition specimens confirms that at least some specimens collected after April 1805 did make it back to Philadelphia. Scattered among the minerals associated with the well-documented Fort Mandan shipment, Seybert listed specimens such as “Pumice. Pacific ocean. Captn. Lewis”; “Green Clay. from the Kooskooche River, west of the Rocky mountains. Captn. Lewis”; “Keffekill [impure clay]. found at the Wallenwaller [Walla Walla] nation on Columbia River. Captn. Lewis”; and “Magnetic Iron sand, borders of the Pacific ocean near the mouth of Columbia river. Captn. Lewis.”28 The existence of these specimens proves that the captains continued their mineral collecting west of the Continental Divide and all the way to the Pacific Ocean, refuting the disparaging opinion of some historians that Lewis and Clark neglected this essential duty.29 [See sidebar, page 21.] Noticeably absent from this list, however, is any specimen collected between Fort Mandan and the Great Falls. All the botanical specimens from this phase of the journey were cached at the Upper Portage Camp on June 26, 1805, and were subsequently ruined in a flood; the mineral specimens presumably succumbed to a similar fate.30

Assessing how many of the captains’ rock and mineral specimens have survived to the present day must begin with the collection at the Academy of Natural Sciences. According to the A.N.S., only “five specimens can now be ascribed certainly to this expedition, two rocks and three minerals.”31 The two rocks—Seybert Collection No. 534 (“pummicite stone”) and ANSP 3916/ex Seybert Collection No. 535 (“lava”)—appear to correspond to Fort Mandan mineral specimen Nos. 62 and 67, respectively. In the journals, the captains’ identification of lava was never correct, nor were their nearly 20 “pumice” or “pumicestone” observations actually related to active volcanism. Unlike today’s restricted definition, which classifies pumice as a volcanically derived vesicular glassy rock,
the captains’ characterization of pumice apparently included any fused or baked rock (termed “clinker”), which explains why they most consistently noted its occurrence in regions where coal beds had burned and slightly metamorphosed the adjacent rock strata. Lewis deftly recognized this causal relationship when he composed a cleverly concise comment to accompany the “Lava & pummice Stone” specimen (Fort Mandan mineral specimen No. 67) sent back from Fort Mandan: “The tract of Country which furnishes the Pummice Stone seen floating down the Missouri, is rather burning or burnt plains than burning rocks” specimen (Fort Mandan mineral specimen No. 67) sent back from Fort Mandan: “The tract of Country which furnishes the Pummice Stone seen floating down the Misour, is rather burning or burnt plains than burning mountains.”

(Air pockets in pumice stones and similar rocks can make them light enough to float.)

Of the three documented mineral specimens identified as selenite (a clear, colorless variety of gypsum), it appears that the specimen labeled Seybert Collection No. 799 corresponds to Fort Mandan mineralogical specimen No. 5 because of its unique cross-like shape (technically termed “twinning”) and its documented date of collection of August 23, 1804. Seybert’s appended description of two other selenite specimens (Seybert Collection Nos. 803 and 804) may be in error because they were described in his circa-1812 catalogue as “Crystallized sulphat of Lime. Calumet Bluff. Missouri. Captn. Lewis,” which would place their date of collection between August 28 and September 1, 1804; according to the Fort Mandan mineralogical specimen list in the A.P.S. donation book, there were no minerals collected in that time frame matching Seybert’s “sulphat of lime” description. This includes those specimens that mention Calumet Bluff in their listed description (Fort Mandan mineralogical specimen Nos. 22 and 34) or that were identified as collected on September 1, 1804 (Fort Mandan mineralogical specimen No. 15) or from adjacent areas of “white Chalk Bluffs” or “white Clay Bluffs” (Fort Mandan mineralogical specimen Nos. 3, 43, 52, and 53).

Additionally, each of the expedition minerals identified by Seybert, in whole or in part, as a “sulphat of lime” have recorded dates of collection indicating they were not gathered in the locale of Calumet Bluff; these include Fort Mandan mineral specimen No. 6 (collected on August 21, 1804), specimen Nos. 13, 20, and 49 (August 22, 1804), specimen No. 8 (August 23, 1804), and specimen No. 35 (September 4, 1804, based on mention of the Quicurre [Niobrara] River). The description of the remaining “sulphat of lime” specimen is too imprecise to be specifically assigned only to Calumet Bluffs (Fort Mandan mineralogical specimen No. 63, described as a “Specimen of a Substance extremely common & found intermix’d with the loose Earth of all the Cliffs & Hills from the Calumet Bluff to Fort Mandon”).

In summary, it appears that Seybert erred in assigning the specimens labeled as Seybert Collection Nos. 803 and 804 exclusively to an area near Calumet Bluff. Based on the information recorded in the A.P.S. donation book, these two specimens could have been collected as far downriver on the Missouri as the confluence with Floyd River (where the expedition departed on the morning of August 21, 1804) and as far upriver as Fort Mandan. As such, the description of the provenance of these specimens in future A.N.S. literature should be expanded to encompass a wider range of the potential collection localities.

To this day, most of the specimens sold by Seybert to the A.N.S. in 1812 remain segregated from the academy’s general collection of minerals—they are kept in a cabinet built for them circa 1825. Could the cabinet perhaps hold samples collected on the expedition? That’s unlikely, because a catalogue of the Seybert collection compiled in 1825 (representing the specimens in the cabinet) lists 157 fewer specimens than the catalogue Seybert compiled circa 1812. One can reasonably assume that among the 157 missing specimens were those collected on the expedition, because nowhere in the 1825 catalogue is there any reference to Lewis or Clark. All or most of these 157 specimens—including those collected by the captains—were probably integrated into the academy’s general mineral collection between 1812 and 1825.

Do any Lewis and Clark specimens still exist in the A.N.S.’s general collection? It is a difficult question to answer because the academy eventually reorganized its collection, placing its non-mineralogical rock and sediment samples in a separate “petrologic” collection. Many, if not most, of the samples collected by Lewis and Clark would be classified as petrologic. In 1993, the academy’s petrologic collection was formally transferred to another Philadelphia institution, the Wagner Free Institute of Science. At the time of the transfer, the academy transcribed complete information from every label in the collection; no references to Lewis or Seybert were found. In principle, an expert in western mineralogy could examine the Wagner specimens and identify those representative of formations along the explorers’ route. Unfortunately, the entire collection was crated and placed in storage, making it inaccessible to researchers at the present time.

**OTHER POSSIBLE EXPEDITION SPECIMENS**

The captains may have collected other mineral and fossil specimens unaccounted for in the expedition literature or
Saurocephalus lanciformis
The only known surviving fossil specimen from the expedition, a portion of a fish jaw classified as *Saurocephalus lanciformis*, collected by Patrick Gass on August 6, 1804, along the Soldier River in present-day Harrison County, Iowa. In 1824, this specimen was described and illustrated by natural historian and physician Richard Harlan in the *Journal of the Academy of Natural Sciences of Philadelphia*, making it the first geological discovery from the expedition to be published in the scientific literature.

at the Academy of Natural Sciences. Samuel George Morton, a physician and amateur paleontologist, makes tantalizing reference to expedition-related fossils in a number of articles published between 1830 and 1842. In one, for example, Morton notes that “Lewis and Clark, in their expedition to the Columbia river, procured a few fossils at the great bend of the Missouri river.” Morton has the captains collecting invertebrate fossils such as *Baculites* (an extinct cephalopod) and *Gryphaea* (an extinct oyster-like mollusk). Unfortunately, neither of these was listed in the Fort Mandan shipment or in the A.P.S. donation book, and they do not appear in Peale’s museum accession book or Sybert’s inventory catalogues. Perhaps the fossils mentioned by Morton have a separate, unknown history of collection and disposition, or maybe he just erred in crediting the captains with these discoveries. A resolution to this question awaits the discovery of written documentation substantiating a Lewis and Clark provenance.

***

Despite the survival of so few Lewis and Clark mineral specimens, we can say for certain that some of them wound up in Philadelphia and that for a time they were displayed in the celebrated museum of Charles Willson Peale. The museum had other rock and mineral specimens besides those collected by the captains. John C. Greene and John G. Burke, two historians of Jeffersonian-era mineralogy, argue that the collection as a whole “must have done much to stimulate public interest in mineralogy and geology” and may have been used by Benjamin Smith Barton, perhaps the pre-eminent naturalist of the day, in his lectures on natural history.

Most of the information on natural history in the Lewis and Clark journals lay dormant for a century, a result of the failure to produce the proposed scientific volume containing, as a prospectus put it, “the information acquired, and fossil specimens collected by Lewis and Clark may have been used by Benjamin Smith Barton, perhaps the pre-eminent naturalist of the day, in his lectures on natural history.”

Still, it’s reasonable to believe that the rock, mineral, and fossil specimens collected by Lewis and Clark may have positively influenced scientific inquiry; perhaps they were used to illustrate points in Barton’s lectures or motivated additional research while on display at the A.N.S.

Whatever their impact on nineteenth-century science, it is certain that Adam Seybert thought highly of them. Seybert had more than thirty Lewis and Clark specimens in his possession and attempted to identify them all. Patrick Gass’s fossil fish jaw, *Saurocephalus lanciformis*, was described and illustrated by natural historian and physician Richard Harlan in 1824, and it is evident from Samuel George Morton’s publications that the purported Lewis and Clark specimens stimulated other fossil collecting in the geographic areas where they were supposedly found. I believe that the expedition specimens played a small but consequential role in facilitating the emergence of mineralogy as a useful science. They also help validate
the expedition’s role as a model for the later U.S. geological surveys of the American West.44

Foundation member John Jengo, a professional hydrogeologist and environmental consultant, lives in Downington, Pennsylvania. He writes technical geological papers and general-interest articles on geology and finds time to travel a portion of the Lewis and Clark Trail each summer. He wrote about the Missouri Breaks in the May 2002 WPO.

Notes

1 Gary E. Moulton, ed., The Journals of the Lewis and Clark Expedition, 13 volumes (Lincoln: University of Nebraska Press, 1983-2001), Vol. 4, pp. 225-226. All quotations or references to journal entries in the ensuing text are from Moulton, by date, unless otherwise indicated.

2 Ibid., p. 232.

3 Ibid., Vol. 2, pp. 500-501. Clark describes this incident in both his field notebook and journal. In the first he says that Lewis “was near being Poisoned by the Smell in pounding this Substance I belv to be arsenic or Cabalts.” In the second he indicates that Lewis also tasted the substance.


5 Ibid., pp. 192-193.


7 In his journal entry for November 22, 1803, Lewis concisely describes encountering “several pieces of wood that had been petrified” (Moulton, Vol. 2, p. 103), while Fort Mandan mineralological specimen No. 39 is listed as “Petrifications obtained on the River ohio in 1803.” The Fort Mandan mineralogical-specimen numbers used in this article follow those recorded in the Donations Book of the American Philosophical Society; see Moulton, Vol. 3, pp. 473-478. Any reference to a mineral specimen in the narrative prefixed by “Fort Mandan mineralogical specimen” refers to those minerals sent back East from Fort Mandan in April 1805.

8 Fort Mandan mineralogical specimen No. 14.

9 It appears that Clark also collected a specimen of the mineral(s) that Lewis had experimented with on August 22, 1804, and subsequently sent it to his brother Jonathan from Fort Mandan. In his letter to Jonathan, Clark stated that the minerals “are dangerous when burnt & pounded as we experienced.” See James J. Holmberg, Dear Brother: Letters of William Clark to Jonathan Clark (New Haven, Conn.: Yale University Press in association with The Filson Historical Society, 2002), p. 86. Whether this specimen was a duplicate of one of the many samples collected on August 22, 1804 (i.e., Fort Mandan mineralogical specimen Nos. 10, 13, 18, 20, 38, 49, 51, 56, or 68) or an entirely new specimen is not known.


11 Ibid., p. 260 (Jefferson to Charles Willson Peale, October 6, 1805), p. 263 (Jefferson to Peale, October 9, 1805), and p. 264 (Jefferson to Peale, October 21, 1805). The minerals contained in this shipment are noticeably absent in Peale’s museum accession book (Memoranda of the Philadelphia Museum, 1804-1841, p. 8) because they went directly to the A.P.S. rather than to Peale’s Philadelphia Museum.


13 Jefferson was aware of Seybert’s singular expertise because they both served on the Historical and Literary Committee that issued a circular letter in 1798 encouraging the scientific community to contribute information to the A.P.S. regarding the “Natural History of the Earth.” Gilbert Chinard, “Jefferson and the American Philosophical Society,” Proceedings of the American Philosophical Society, Vol. 87, No. 3 (July 14, 1943), p. 270.


15 Ibid., Vol. 4, pp. 334 and 335n. Lewis states that Clark’s selection of articles to be deposited included “my specimens of plants minerals &c.” collected between Fort Mandan and the Great Falls.

16 Ibid., Vol. 8, p. 419.

17 The possibility that Lewis may have personally delivered the surviving post-April 1805 specimens to Philadelphia is suggested in a letter Jefferson wrote to Peale on December 21, 1806, which states in part, “I expect Capt Lewis here to-day or tomorrow. I presume that after a while he will go on to Philadelphia and carry some of his new acquisitions.” Miller, Vol. 2, Part 2, p. 992.

18 Jackson, Vol. 2, pp. 469-470. One can only guess why Lewis would wait three years to send these additional specimens. Nor can we be absolutely certain that the items were collected on the expedition, although it’s reasonable to assume they were—the shipment included, according to Peale, “Indian dresses, pipes, arrows, an Indian pot entire, Skins of Beavers.”

19 Ibid., p. 476.

20 Ibid., p. 478; Memoranda of the Philadelphia Museum, 1804-1841, pp. 43-45. Peale had recorded the pre-expedition specimens donated by citizens of St. Louis (the first shipment) in his museum accession book as being “presented by Mr. Jefferson,” making no mention of Lewis or Clark (see Memoranda, p. 5). It is also apparent that he was not the recipient of the Fort Mandan specimens (the second shipment), which went to the American Philosophical Society. It is possible, and even probable, that the minerals mentioned in Peale’s December 1809 entry in his museum accession book were just those items collected after the westward-bound expedition departed Fort Mandan.


25 Perhaps out of respect for the captains’ exclusive right to be the first to publish their discoveries, Seybert refrained from publishing his work on the expedition specimens. For example, there are no Lewis and Clark specimens included in Seybert’s paper entitled “A Catalogue of some American Minerals, which are found in different Parts of the United States,” published in 1808 in Volume V of the journal The Philadelphia Medical Museum, even though Seybert had ready access to the Fort Mandan mineralogical specimens by this time.

26 Greene and Burke, p. 28.

27 Earle Spamer, the managing editor of the A.N.S.’s scientific publication, states that the collection was purchased in 1812 by John Speckman, a founding member of the Academy of Natural Sciences, who subsequently donated the collection to the A.N.S. (Personal Communication, June 19, 2002.) Greene and Burke state that Seybert sold his collection directly to the A.N.S. in the summer of 1812; the A.N.S. procured boxes in 1813 to hold the specimens and purchased glass cases in 1814 to display them. (Greene and Burke, p. 39.)

28 Seybert’s Catalogue of Minerals as reported in Greene and Burke, pp. 29-30.


32 Moulton, Vol. 3, p. 478. Lewis also commented under Fort Mandan mineralogical specimen No. 62 that “I can hear of no burning mountain in the neighborhood of the Missouri or its Branches, but the bluffs of the River are now on fire at Several places ... The plains in many places, throughout this great extent of open country, exhibit abundant proofs of having been once on fire—Witness the Specimens of Lava and Pummicestone found in the Hills near fort mandon.” [A reference to Fort Mandan mineralogical specimen No. 67.]

33 Spamer, et al., p. 50.

34 To explain their absence from the 1825 catalogue, some have hypothesized that Seybert did not include the Lewis and Clark specimens in the collection he sold to the A.N.S. in 1812. (Greene and Burke, p. 39.) But the A.N.S.’s general collection contains specimens included in the circa-1812 catalogue, indicating that at least some, if not all, of the Lewis and Clark specimens were part of the collection purchased from Seybert. More likely, the absence is due to their probable removal from the Seybert collection sometime before the 1825 re-cataloging.

35 Spamer, et al., p. 51.

36 Spamer, personal communication, June 19, 2002.


40 The only known surviving mineral specimens collected by Lewis and Clark are among the essential expedition artifacts in Lewis & Clark: The National Bicentennial Exhibition, now touring the U.S. (See www.lewisandclarkexhibit.org for places and dates.)

41 Greene and Burke, p. 37.


43 Richard Harlan, “On a new fossil genus, of the order Enalia Sauri, (of Conybeare),” Journal of the Academy of Natural Sciences of Philadelphia, Vol. 3, 1824, pp. 331-337, plate 12. Harlan’s paper begins, “About sixteen years ago, there was deposited, by Lewis and Clark, in the cabinet of the American Philosophical Society, a fossil organic remain of some unknown marine animal. During the expedition of these gentlemen up the river Missouri in the year 1804, this specimen was found in a cavern situat[ed] a few miles south of the river, near a creek named Soldier’s Run.”

A pair of historic but little-known paintings of the Lewis and Clark Trail can be seen for the first time by the public. The two privately owned landscapes, the Heart of the Gates of the Rocky Mountains, of a landmark on the Missouri River near Helena, Montana, and Fort Rock at Three Forks of the Missouri, a formation overlooking the Three Forks of the Missouri, were painted a century ago by the Montana artist Ralph Earll DeCamp. Neither has ever been publicly exhibited. Both paintings are landscapes executed by DeCamp that appear as black-and-white illustrations in Olin D. Wheeler’s 1904 travelogue, The Trail of Lewis and Clark. The two paintings went on display at the Lewis and Clark Historic Trail Interpretive Center in Great Falls in May and will remain there through June of next year.

DeCamp was also a photographer and cartographer; he took many of the photos in Wheeler’s book and created all of its maps. As an artist of the trail he never achieved the fame of his Montana contemporaries Charles M. Russell, Edgar S. Paxson, and O.C. Seltzer, narrative artists whose paintings often illustrated moments of high drama on the expedition. DeCamp, by contrast, often painted landscapes in which people are absent or are far less significant. Narrative painting and landscape art are different genres that defy comparison, and an artist working in one cannot be judged by the standards of the other. There is a muted

BY JILL CARLSON JACKSON

LANDSCAPES PRESERVED FOR HISTORY

The Lewis and Clark paintings and photographs of Ralph Earll DeCamp

BY JILL CARLSON JACKSON

This photo shows DeCamp, under an umbrella, sketching in the field near Helena, sometime in the early 20th century. In the photo at the top of the page, taken in 1933, the artist poses with palette and canvas in his studio.
dignity to DeCamp’s work, and critics today regard him as one of Montana’s premier artists.

**The Artist’s Early Years**

Ralph Earll DeCamp was born in Attica, New York, on September 17, 1858, the only child of Horace and Renette Earll DeCamp. In 1867 the family moved to Wauwatosa, Wisconsin, near Milwaukee. Here DeCamp received his first formal lessons in painting. His instructor was Francis A. Lydston, a Boston-trained artist adept at many genres. The DeCamps moved again, this time to Minnesota. By 1871 they had settled in Moorhead, a bustling port town at the head of navigation on the Red River, a commercial waterway linking the upper Midwest to Canada. The Northern Pacific Railway reached Moorhead from Brainerd, Minnesota, in the east, in early October of that year. This company would figure prominently in DeCamp’s career.

The teenaged DeCamp was regarded as a prodigy — he graduated from high school before turning fifteen, and by seventeen he was exhibiting and selling his paintings in a local bookstore. The influence of Moorhead’s waterfront can be seen in the artist’s lifelong fascination with water, a prominent feature in both his photography and painting. As his friend Charles M. Russell later noted, “that boy can sure paint the wettest water of anybody I know. You can hear his rivers ripple.”

DeCamp had a knack for mechanics as well as art and worked as an engineer at a sawmill and aboard a steamboat. At age eighteen he built a 25-passenger steam launch, dubbed *Nameless*, which he successfully operated for several years. The young artist-engineer-entrepreneur was also the co-owner of a threshing business. His personal life was thriving, too. By age 20 he had married Edna Blanchard, the daughter of the local sheriff. A son, Eddie, was born a year later, but a year after that, in June of 1880, Edna died, and DeCamp found himself a widower at age 22.

Perhaps seeking a change of scenery and new directions to ease his emotional trauma, DeCamp headed to Philadelphia to study art, leaving Eddie with his parents. His departure was announced in the Moorhead *Daily Advocate* in December, 1880. In a letter published in the Fargo, North Dakota, *Daily Argus* the following September, DeCamp declared the East “a grand country for an artist, there being plenty of material to fill a sketch book with, and I have not been idle.”

Within a year or so he was back in Moorhead. In 1884, a sketch he made of a train accident figured prominently in a court case. DeCamp’s sketch caught the attention of Charles Fee, an executive of the Northern Pacific Rail-
way. Fee recruited him to produce art for the Northern Pacific, and in June of 1885 DeCamp set out for Yellowstone National Park with a Norwegian photographer, Ole E. Flaten. Finding the park buried in deep snow, they took a side trip to Helena, where it was so hot that DeCamp wondered “how anybody could stand the sun’s rays and breathless air. I wouldn’t live here if they gave me the state.” Flaten and DeCamp soon returned to Yellowstone and later went on to Idaho and Washington. The Northern Pacific purchased many of the paintings DeCamp produced from the sketches he made on this trip.

Despite his unfavorable first impression, DeCamp moved to Helena in 1886. It would be his home for most of the next fifty years. He loved Montana and made its stunning scenery the primary subject of his painting and photography. Never trusting his art to support him, DeCamp found employment in Helena, first as manager of the Helena Abstract and Title Company and later as a draftsman for the U.S. Surveyor General’s Office, an experience that would stand him in good stead in his later cartographic work for Wheeler.

**HELENA ARTISTS’ CLUB**

Helena was home to other budding artists, including the young Charlie Russell, and in 1888 they banded together to form a sketch club; DeCamp served as its first president. The club sponsored periodic weekend outings and met twice weekly to sketch models in DeCamp’s downtown apartment, which he had outfitted as a studio.10

DeCamp sometimes took his easel into the out-of-doors and painted directly from nature. Most of the time, however, he appears to have worked in his studio from sketches or photographs made in the field. This can be seen by examining his 1904 painting *Box Cañon* and a photograph he took of what is clearly the same scene (top and bottom, right). They are very similar except for the absence in the painting of a few details such as the tree to the left of center in the photograph. DeCamp had a faculty for capturing the landscape accurately and in detail. According to David Hilger, DeCamp’s brother-in-law and the former owner of the painting, the scene is a stretch of track on the Montana Railroad once known as the Jawbone, located on Sixteen Mile Creek near Lombard.11 (The Corps of Discovery passed the mouth of this creek, which Meriwether Lewis named for expedition member Thomas Howard, on July 26, 1805.)12

One of the artist’s favorite locations near Helena was the Gates of the Mountains, so named by Lewis in June of 1805. To get to the Gates, DeCamp often took a steam excursion boat owned by David Hilger’s father, Nicholas, a local judge and rancher. A photograph of the Hilger ranch which appears in Wheeler’s book was almost certainly taken by DeCamp. It was here that the widowed artist met and fell in love with Margaret Hilger, the judge’s daughter, who was ten years his junior. The couple eloped in 1891. Their decision caused “considerable turmoil” for the judge, according to Margaret’s sister, but DeCamp and his new father-in-law were soon “on the best of terms.”13 Ralph and Margaret had one child, a son, Renan, born in 1896. When Renan was growing up, mother and son would often accompany DeCamp on his field trips. Margaret was an accomplished musician and took her violin along, playing while her husband sketched and photographed.14

![DeCamp’s photo of a train passing through a box canyon on Sixteen Mile Creek, Montana, (top) is virtually identical to the painting he did of the same scene (bottom). Their similarity illustrates his preference for working in the studio from photos and sketches made in the field.](image-url)
PARTNERSHIP WITH WHEELER

In the summer of 1902, DeCamp was approached by the Northern Pacific Railway to accompany Olin G. Wheeler on a trip through the Bitterroot Mountains. Wheeler, the Northern Pacific’s director of advertising, was retracing Lewis and Clark’s trail from St. Louis to the Pacific for The Trail of Lewis and Clark, a two-volume narrative that would appear in 1904, during the expedition’s centennial. The work was an expansion of the 1900 edition of Wonderland, a lavishly illustrated annual published by the Northern Pacific to promote tourism along its scenic routes.15 DeCamp was one of a number of photographers who signed on to the project, and Wheeler also enlisted him to draw the book’s maps.

Wheeler and DeCamp, along with a guide and a cook, traveled eastward from Kamiah, Idaho, on a pack train over the western leg of the Lolo Trail. Wheeler was conducting field research for both his book about Lewis and Clark and an article about the expedition planned for the 1903 edition of Wonderland. DeCamp, for his part, took countless photographs, drew sketches, and made cartographic notes.16

DeCamp photographed using the wet-plate process. This meant carrying, in addition to a bulky large-format camera, a supply of glass plates and a portable darkroom for preparing and finishing negatives. The process required setting up the camera and composing the picture, then retreating to the darkroom to coat a plate with a solution of collodion and silver nitrate. The plate was then placed in a light-proof container and slipped into the camera for an exposure that could last several minutes.17

Rain, mud, and worn-out pack animals forced an early conclusion of what was nonetheless a productive trip. Wheeler’s editors did not attribute any specific photographs to DeCamp in either Wonderland 1903 or The Trail of Lewis and Clark, but we can say with confidence that at least 28 photos, nine maps, and two paintings in the book are the work of this versatile artist. Unfortunately, the original negatives and any prints made from them have disappeared.

DECamp’S PLATE-GLASS NEGATIVES

In 1978, Dan Hilger, grandson of the formidable Judge Nicholas Hilger, gave the Montana Historical Society 350 of DeCamp’s plate-glass negatives. Although none of the images produced from them appear in Wheeler’s book, many are of the Lewis and Clark Trail and are important documents of the explorers’ route as it appeared a century ago. Three of them are shown at right.
The first photo—of Fort Rock—was also the subject of one of the two DeCamp landscapes that appear in Wheeler’s book. Fort Rock overlooks the Three Forks of the Missouri. The photo shown here is owned by the Missouri Historical Society. DeCamp probably based his painting of Fort Rock (page 28) on this and other photographs he may have taken, for the formation seen in the painting is clearly the same Fort Rock we see in the photograph (opposite). The painting also shows a pile of rocks and a figure removing prickly-pear spines from his moccasins. This is presumably Clark, who complained about the prickly pears at this site in his journal entry for July 26, 1805.\(^\text{18}\)

The second photo is of Eagle Rock, on the Missouri River between present-day Great Falls and Helena. It was here that Lewis on July 18, 1805, sighted “a large herd of the Bighorned animals on the immenescely high and nearly perpendicular cliff opposite to us.”\(^\text{19}\) He expressed amazement at the bighorn sheep’s surefootedness on such vertical terrain. In the foreground of the photo we see an old sod-roofed homestead, evidently abandoned. Its inclusion in the picture serves as a focal point while also fulfilling Wheeler’s purpose of documenting changes along the trail since the explorers’ day. Although the sod house is long gone, today’s Eagle Rock and its immediate environs are little changed.

In the third photo, entitled “Summit Lewis and Clark Pass,” the lighter-colored dead vegetation in the foreground contrasts starkly with the darker forested hills in the background. This area, too, looks much the same today. The misnamed Lewis and Clark Pass is on the Continental Divide immediately west of Great Falls. Lewis (but not Clark) crossed it on July 7, 1806, during the return journey.

DeCamp was particularly noted for his paintings of the Gates of the Mountains. He was enthralled with this dramatic, cliff-lined stretch of the Missouri, which he depicted in a painting, entitled The Heart of the Gates of the Rocky Mountains (top right), that appears on page 347 of The Lewis and Clark Trail. Wheeler’s book includes no less than three photos of the Gates. We can say with certainty that DeCamp took at least one of them (right, bottom) because the handwriting of the caption in the lower left-hand corner is identifiable as his.\(^\text{20}\) The view shown in his painting isn’t exactly replicated in any of DeCamp’s five photos of the Gates in the Montana Historical Society’s collection.

DeCamp’s paintings of Fort Rock and the Gates of the Mountains exemplify, respectively, his talents for depicting water and his use of soft pastel colors to illuminate Montana’s big sky. In both paintings the sky is dynamic and full of depth, and in the Fort Rock scene the colors hint at a brewing storm.

The artist’s later years

In 1911, DeCamp was asked to execute six landscapes for an expansion of the Montana State Capitol, in Helena. The state commissioned him to paint four more in 1927. Today these ten paintings, whose subjects include the Gates of the Mountains and the Bitterroot and West Gallatin rivers, can still be seen in the capitol’s law library. By then DeCamp had retired from his day job in the surveyor general’s office. His wife, Margaret, died suddenly in November of 1934, and DeCamp moved to Chicago the following January to be with son Renan, an electrical engineer. That summer he returned to Montana for what turned out to be his last visit. In March of 1936 he suffered a stroke and died several weeks later, at age 77. He is
buried alongside Margaret in the Helena Valley.21

DeCamp in his day was known in Montana as an accomplished artist, but beyond his adoptive state his name never had much currency. Shy and self-effacing, he never sought fame and rarely exhibited or promoted his works. Thanks in part to the Lewis and Clark Bicentennial, this gifted but unheralded landscapist is now getting the recognition he deserves.

Jill Jackson served as director of library and education services for the LCTHF for more than two years. She is currently the director of testing at San Juan College in Farmington, New Mexico, and resides in Durango, Colorado. Jackson can be reached at jacksonj@sanjuancollege.edu.

Notes
2 DeCamp evidently gave or sold the paintings to Wheeler, for they were in the estate of Wheeler’s granddaughter in 1945 when a collector purchased them. In 2004 they were sold to Thomas and Jane Petrie, of Denver, Colorado. The Petries lent them to the Great Falls interpretive center, which is administered by the U.S. Forest Service. Arrangements for the loan were negotiated by John R. Howard, a Great Falls art dealer, and the author, who at the time was director of the LCTHF’s William P. Sherman Library.
5 Moorhead Red River Star, April 24, 1875. Two years earlier, in its issue of February 23, 1873, the paper had predicted the sixteen-year-old’s future would be “bright with usefulness in the mechanical, and brilliant with fame in the art world.”
7 Lambert.
8 Ibid., quoting the Fargo Daily Argus of September 1, 1881. Accounts in the local press state that DeCamp attended the Pennsylvania School of Art, but it’s not certain whether a school with this specific name existed. He may have enrolled at the Pennsylvania Academy of Fine Arts, even though that institution has no record of him as a student. According to the academy’s archivist, students typically attended for as long as they wanted or could afford, and no degrees were conferred. Cheryl Leibold, e-mail to the author, May 5, 2005.
10 Lambert.
14 Lambert.
15 Olin Dunbar Wheeler (1852-1925) was born in Ohio and served as a cartographer in John Wesley Powell’s 1874-79 surveys of the Colorado River. He worked out of the Northern Pacific’s headquarters, in St. Paul, Minnesota, as director of advertising from 1892 to 1909. Stephen Dow Beckham, Doug Erickson, Jeremy Skinner, and Paul Merchant, The Literature of the Lewis and Clark Expedition: A Bibliography and Essays (Portland, Ore.: Lewis & Clark College, 2003), p. 211.
16 As far as can be determined, this was the only portion of the Lewis and Clark Trail visited by DeCamp for cartographic purposes. Most of the nine maps in Wheeler’s book cover portions of the trail visited by Wheeler but not DeCamp, so a considerable amount of research must have gone into making them.
18 Moulton, Vol. 4, p. 432. The captains noted Fort Rock but did not name it. The name appears in Elliott Coues’s 1893 edition of the journals. See Elliott Coues, History of the Expedition under the command of Lewis and Clark (New York: Francis P. Harper, 1893), p. 443, note 31. A photo of Fort Rock from a southerly vantage appears on page 375 of Wheeler’s book, and it is reasonable to assume that DeCamp was the photographer.
19 Moulton. Vol. 4, p. 397.
21 Lambert.
Foundation house ad
(1 of 2)
Two new essay collections reflect on Lewis & Clark

The first of these two collections, part of a growing library of short papers and presentations occasioned by the 200th anniversary of the Lewis and Clark Expedition, comes out of a series of sessions of the Dakota Conference on Northern Plains History, Literature, Art, and Archaeology held in Sioux Falls, South Dakota, over a five-year period ending in 2002.

As is true of most such collections, the quality of The Lewis and Clark Expedition: Then and Now is more than a little uneven.

Some of the papers seem amateurish, and many go over paths now well worn by previous scholars, but a few make genuine contributions. The most impressive paper is one on Native American trade patterns by Ralph J. Coffman, Jr. While James P. Ronda’s seminal Lewis and Clark among the Indians (1984) remains the gold standard in this area, Coffman has gone into the latest scholarship in the field and does a good job of outlining the way these trade relationships worked and what the two explorers failed to understand about them.

Laurinda W. Porter’s piece on honoring and gift-giving among the Sioux tribes relies on native informants and also does a good job explaining how these native concepts affected their interactions with the expedition members.

Less successful is John D.W. Guice’s attempt to persuade us that Meriwether Lewis was murdered and that his remains should be exhumed to test this persistent theory about the explorer’s death. Guice offers us no suspects, only nameless hypothetical bandits along the Natchez Trace. Both Thomas Jefferson and William Clark, who knew Lewis best, had no trouble believing he had killed himself. This argument should be allowed to die.

Robert C. Steensma’s tribute to Bernard DeVoto is pleasant to read, and Jerry L. Simmons’s piece on the medical aspects of the expedition summarizes neatly the various medicines available to the captains.

The more impressive of these two collections is Finding Lewis & Clark: Old Trails, New Directions

Old Trails, New Directions, which prints 11 of the 19 papers presented at a conference in Pierre, South Dakota, hosted by the South Dakota State Historical Society in April 2003. The conference attracted not only Ronda (the volume’s editor), but Gary Moulton, William Foley (one of William Clark’s recent biographers), Elliott West, Peter J. Kastor, and others, all well-known in the scholarship of the West.

As one might expect, some of the papers are standouts. Kastor summarizes clearly and concisely how the Louisiana Purchase affected the political context in which the expedition took place. His paper manages, all by itself, to infuse this grand American adventure story with a historical sophistication it has too often lacked in the past. W. Raymond Wood is similarly clear and concise on the changing tribal relations Lewis and Clark encountered on the upper Missouri. Richard Etulain provides us with the first survey I have seen that takes seriously the fiction—and there has been a great deal of it—inherited by the expedition. A paper by Joseph A. Musselman explains how his Web site, Discovering Lewis and Clark, developed, and his account of the rapidly growing opportunities for what he calls “hyperhistory” can only be described as fascinating. To top it off, we have Elliott West’s fine essay taking a step backward and asking the inevitable question about the bicentennial hoopla: Has it “made the expedition seem more historically weighty than it truly was?”

L&C in historical context

The answer, says West, is yes. Like Kastor, he wants to put the Lewis and Clark expedition into its wider context. He brings up the other expeditions that left for the Far West at the same time, or shortly thereafter. He discusses the chain of events that led to the Louisiana Purchase, starting with the impact of tropical disease on the French troops who died by the thousands in Haiti and led to Napoleon’s decision to cut his losses in America. History, he notes, is not just a record of brave men doing heroic things. Much depends on chance, coincidence, population movements, the evolution of trade relationships, and so on. It’s a wise essay, and much needed. We may indeed have reached the point where we have enough Lewis and Clark, and ought to be turning our attention to other expeditions and other factors in the history of westward expansion. That may be the wrong thing to say in this magazine, but West says it and it needs to be said.

—Anthony Brandt
In Brief: Indians; venereal disease; today’s L&C Trail


If nothing else, the Lewis and Clark Bicentennial has sensitized us to the view that most of what the Corps of Discovery “discovered” in its journey across the West was already familiar to the region’s native inhabitants. Colin Calloway’s hefty and thoroughly researched study reiterates this point while underscoring the complexity and dynamics of the Native American cultures the explorers encountered along the way.

Although those cultures may have appeared static to Lewis and Clark, they were in constant flux as tribes reacted and adapted to the impact, direct and indirect, of Europeans and their weapons, horses, and diseases. Had the expedition occurred fifty, twenty, or even ten years earlier, what the captains saw and reported would have been markedly different.

When Lewis and Clark encountered the Shoshones in August of 1805, for example, they found this transmontane tribe living in mortal fear of the plains-dwelling Atsina and Piegan Blackfeet. Yet a few decades before, it was the Atsina and Piegans who lived in terror of the Shoshones.

As Calloway explains, the change in relative fortunes can be largely attributed to geography. The Shoshones’ proximity to Spanish settlements gave them early access to horses, which in turn gave them the mobility to cross the mountains to hunt buffalo and raid the villages of the horseless Atsina and Piegan. Soon enough, the Atsina and Piegan acquired horses of their own from southern plains tribes. From Canadian fur traders they also acquired guns, which the Shoshones lacked. From that point on, the Shoshones entered the plains at their peril.

One Vast Winter Count is part of the University of Nebraska Press’s History of the American West Series, and Calloway is chair of the Native American Studies program at Dartmouth College. This masterful work of scholarly synthesis places the expedition into a broad historical and cultural context, and it has a grand narrative sweep.

Venereal Disease and the Lewis and Clark Expedition, by Thomas P. Lowry. University of Nebraska Press. 117 pages. $21.95, cloth. Order from bookstores or www.nebraskapress.unl.edu.

This short but brightly, almost breezily, written volume surveys much of what is known and (mostly) speculated about syphilis and gonorrhea on the expedition. Lowry, a physician, points out that treatments for “the venereals” made up a sizable portion (roughly 15 percent) of the medical supplies carried by Lewis and Clark. These included mercury and penis syringes for administering it. “The Corps of Discovery,” observes Lowry, “fought syphilis with mercury, time-honored by three centuries of use, and endured a treatment that was almost as distressing as the disease itself.” The journals report by name only three members of the expedition diagnosed for V.D. (Silas Goodrich, George Gibson, and Hugh McNeal), but it’s clear that others were treated and that many, perhaps most, of the members had sexual contact with Indians during the winters at Fort Mandan and Fort Clatsop and suffered the consequences.

Lowry reviews speculation that Sa-
cagawea may have suffered from gonorrhea acquired from her husband, Touissant Charbonneau. He is skeptical of the argument by epidemiologist Reimert Ravenholt that Lewis contracted syphilis from a Shoshone woman and that the disease’s subsequent advancement affected his sanity. (“From the journals it would appear that neither captain had a female bed partner during the two-year journey.”) He discusses the debate about syphilis’s probable origin in the New World, noting that Columbus himself may have suffered from “the pox,” which people of one nationality tended to blame on another—English, Germans, and Italians called it the French disease; to Russians it was the Polish disease and to Poles it was the German disease; the Japanese called it the Portuguese disease.


It’s not really a travelogue, although Hill traveled and photographed much of the Lewis and Clark Trail and also followed Lewis’s pre-expedition route down the Ohio. It’s not quite a travel guide, although it contains the sort of information about historic sites and interpretive centers one expects from a guide. It’s also not exactly a history, although in a piecemeal way it tells the story of the expedition and selectively profiles its participants. Students of Lewis and Clark will be familiar with most of the information found here.

The book’s by far most interesting and lengthy section (totaling 90 pages) is a series of photographs Hill took of the trail, broadly defined to include Monticello, Harpers Ferry, and the Ohio Valley. Most of these photos are juxtaposed with 19th-century drawings and paintings of the same sites. The photos and artwork, mainly by Karl Bodmer and George Catlin, are reproduced in black-and-white.

—J.I.M.
Washington State University Press
Comparing Lewis & Clark’s speeches to the Otos and the Yankton Sioux

A thick fog greeted the Corps of Discovery and a delegation of Yankton Sioux on the early morning of August 30, 1804, at Calumet Bluff on the Missouri River, near today’s Yankton, South Dakota. Both parties were preparing for a council to be held later that day. This would be the second council that Lewis and Clark would hold with an Indian nation, the initial one with Oto and Missouri chiefs having occurred nearly four weeks earlier, on August 4.

After breakfast, as Clark noted in his journal, the two captains sent trader Pierre Dorion, Sr., “in a Perogue to the other Side . . . for the Chiefs and [warriors of the Soues].” Dorion returned with the delegation in a pirogue at ten o’clock. At noon, Clark ended his preparation for the parley. This probably included finishing the draft of a speech he had begun the previous day. Although Clark wrote out the speech, Lewis delivered it, with Dorion doing the translating. The speech took four hours to transmit.

Clark’s journal tells us that the speech expressed “the wishes of our government” vis-à-vis the Yanktons. From the journal of Sergeant John Ordway we know that Lewis spoke of his desire for the Yanktons to make peace with their neighbors, the Otos and Missouri, and for their head chief to visit the “new Great Father,” President Thomas Jefferson, in Washington, D.C., the following spring. When the Indians returned the next morning they promised to do these things. They also spoke of their need for dependable trade for clothes, guns, powder, ammunition, and whiskey.

Because no copy of Lewis’s speech to the Yanktons was known to exist, for years historians could only infer the essential points of Lewis’s address from Clark’s and Ordway’s journal accounts. They could also assume that it was similar to Lewis’s earlier speech to the Otos and Missouri, which can be found on pages 203–208 of Donald Jackson’s Letters of the Lewis and Clark Expedition with Related Documents, 1783-1854.

That situation changed in March 2003, when a manuscript of Lewis’s Yankton speech was presented to the Oklahoma Historical Society. The Yankton speech and several other documents, including a peace-medal certificate signed by Lewis and Clark which they presented to the Oto chief Big Ax on August 19, 1804, were gifts made by Joan Aitson and her family. Aitson is the granddaughter of Ralph Dent, the last chief of the Oto nation, a tribe removed to the Indian territory of Oklahoma in the 1880s. For three generations the documents were stored in a trunk that had originally belonged to Madge Dent, Ralph’s wife. It is not known how the manuscript of the address delivered to the Yanktons and addressed specifically to “We oog shen” (the Yankton chief Shaking Hand) came to be associated with a family of Otos.

Comparing Lewis’s speech to the Otos and Missouri with the one he delivered to the Yanktons, one notices striking similarities. Both speeches contain many identical sentences and some closely similar paragraphs. Each speech begins with a salutation to the main chief of the respective tribe, Petit Voleur or Wear-ruge-nor of the Otos and Shaking hand or We-oog-shen of the Yanktons. The two speeches often employ the same phrases with identical spelling, capitalization, and punctuation, such as “great Chief of the Seventeen great nations of America,” “shut your ears to the councils of Bad birds,” and “whose base was washed by the gulph of human woes.”

Toward the end of each speech, Lewis addressed “our oldest son,” informing him that if he could not leave his nation, then he should send a delegation of other chiefs “to see your great father and hear his words.” Whoever went must take the flag and certificate presented by the captains as proof that they came at their invitation.

The two captains’ signatures appear on both documents. Lewis identifies himself as “Capt. 1st U.S. Regt. Infantry” on both. On the speech of August 4 his signature appears first, but on the speech of August 30 it follows Clark’s. On the first speech Clark identifies himself as “Capt. on the Missouri Expedition,” and on the second he is “Captain Expd for N W D.” (A hole partially obliterates the first word in the title—”Captain” is my reading of it. The initials “N W D” stand for North Western Discovery.)

Last year, the Oklahoma Historical Society donated two photographic copies of the Yankton speech to the Missouri National Recreational River, administered by the National Park Service. One set has been laminated for use in the park’s interpretive programs. The other has been framed and now hangs in the Lewis and Clark Visitor Center at Gavins Point Dam, near Yankton. A transcription of the speech is available to anyone sending an e-mail request to mnrr_interpretation@nps.gov or calling 402-667-2550.

—George Berndt

George Berndt is the national park ranger at the L&C Visitor Center, Gavins Point Dam.
Foundation house ad
(1 of 2)
Flathead Chapter organizes L&C “welcome” for Montana school kids

The passion of LCTHF members for the Lewis and Clark story is evident in programs and activities all across the country. Rarely, however, do the efforts of one small chapter reach hundreds of students in a few days.

To commemorate the Corps of Discovery’s arrival in Montana, the Flathead Chapter recently organized an educational event in Kalispell for fourth graders throughout the region. More than six hundred students from 16 schools participated in the chapter’s event, which included presentations on Sacagawea, York, tribal cultures, and Blackfeet Indian dances.

Chapter president JoLynn Yenne, a retired teacher, said she always appreciated the assistance of others in supplementing the classroom curriculum. She decided to help area teachers and selected April 26-29 for the “Welcome to Montana” educational event.

She collected educational materials, curriculum guides, activities, and information from organizations and museums to prepare packets for 55 teachers. Those same teachers were invited to bring their classes to the event at a local museum for a variety of learning experiences.

About one hundred students at a time participated in a two-hour educational experience (one group each morning and one each afternoon). They were divided into three groups and rotated through presentations and exhibits. The museum’s existing American Indian exhibit included a variety of artifacts and a tipi, which proved very popular with students.

Each day, the organizers planned special presentations for students. They had Critter Man, the Two Medicine Lake Indian Dancers, and a York reenactor. The original three-day event spilled into a fourth day when interest ran high, but it was too late to schedule an additional “special” program, Yenne said.

Additional programs included a general discussion of the explorers’ journey through Montana, the story of Sacagawea, and a presentation by a reenactor, Honeybear the Mountain Man, on trapping and trading.

“You can stand in a classroom and talk and show videos, but this is phenomenal. It’s a true learning experience,” said Benilda Delgado, a fourth-grade teacher from Whitefish. “They’ll go home and talk about this for a long time.”

The Blackfeet dancers perform regularly on their reservation and around Montana, but this was the first opportunity for most students to learn about the dances. Dancer Joe McKay explained the use of beads, feathers, bone, and leather in the dancers’ clothing. He also explained the history and purpose of each dance. The group performed four different dances for the students, accompanied by Grammy nominee Clinton Croff and his father, Ray, singing and drumming.

“The kids are obviously riveted,” said Liz Sorlie, a fourth-grade teacher from Helena Flats. “This is a unique opportunity for these students in this place at this time. These are the best presentations I’ve ever seen.”

“Welcome to Montana” required months of planning by several chapter members, including a great deal of fund raising to support the event. Sixteen chapter members and friends volunteered at the event, and four museum docents volunteered to supervise the Indian exhibit. One individual presenter and one group were paid, and seven presenters volunteered their time.

The chapter had to rent the museum and pay for some materials in the teachers’ packets. The chapter’s total cost for the event was $1,965. It received donations and grants from individuals and local businesses. Chapter members credited Yenne with doing the bulk of the work and never seeming to tire.

“This has been wonderful,” Yenne said. “I’m a retired teacher just trying to make sure children enjoy history.”

—Wendy Raney

Gallagher leads fund-raising

Sherry Lacey Gallagher of Great Falls, Montana, has been named director of development for the Lewis and Clark Trail Heritage Foundation. Her focus is developing the foundation’s endowment fund to secure its long-term financial future.

Gallagher has worked in the nonprofit field doing grant writing, fund-raising through annual events, and helping to run a capital campaign for a child-development center in Great Falls. She previously worked 17 years in health-care management.

She grew up in Council Bluffs, Iowa, and moved to Montana in 1977. Gallagher lives in Great Falls with her husband, Barry, and their two daughters. She is a Rotarian and helps with an annual fall fundraiser for the Rotary Camp in the Big Belt Mountains outside of Great Falls. She is also a 4-H group leader.
Camera One
Destination Pacific
pickup 5.05,
page 3
Writers rarely if ever note that Sacagawea’s linguistic skills would have gone for naught had it not been for Charbonneau’s ability to understand Hidatsa and speak French. He, too, was an indispensable link in the cumbersome chain of communication with the Shoshones; for example, Cameahwait to Sacagawea to Charbonneau to Labiche (or Cruzatte or Drouillard) to Lewis and Clark, and then back again—over and over. Most commentators on this stage of the journey pride themselves for recognizing Sacagawea’s pivotal role as an interpreter (or as Clark would have it, “interpretes”) but generally ignore Charbonneau’s equally pivotal part in the process.

To point out this disparity is not to disparage Sacagawea’s undeniable contribution to the success of the expedition but to give Charbonneau his due. Far from being “significantly less important,” as Smith suggests at one point in his essay, Charbonneau’s contribution was crucial. Plainly, his linguistic ability was the complementary “other half” that closed the gap and made Sacagawea’s efforts understandable to the captains. In this respect, husband and wife were a team in the truest sense of the word. Lewis and Clark hardly recognized their luck: they got two interpreters for the price of one since Sacagawea did not get paid for her services.

However, at the end of the journey, Lewis was not particularly impressed with Charbonneau and characterized him as a man of “no peculiar merit.” Moreover, Lewis chose not to recommend him for bonus compensation insomuch as he had already been mustered out at the Knife River villages in August 1806. Clark obviously was not of the same opinion; and he, of the two, is generally recognized as the shrewder judge of a man’s character and abilities.

Even before the corps had arrived back in St. Louis, Clark had written Charbonneau a poignant letter in which he regretted his inability to pay Sacagawea for the important services she had rendered during the journey. In that letter he also offered to set up Charbonneau as a trader in the St. Louis area or to settle a tract of land on him so he could take up a more sedentary life as a farmer if he preferred. Clark even offered to pay Charbonneau’s travel expenses to visit his family still in Montreal. And he offered to take in Jean Baptiste—his “little dancing boy,” Pomp—and educate him in St. Louis as if he were his own child (an offer he would later honor). It is probably true that most of this outpouring of generosity was prompted by Clark’s concern for the well-being of Sacagawea and her son, but there is a hint of some measure of regard for Charbonneau as well.

In last analysis, it is abundantly clear that Clark did not consider Charbonneau “good for nothing.” Clark kept him on as a government-paid interpreter after the expedition was disbanded. Even after Sacagawea died, in 1812 at Fort Manuel, this official connection between Clark and Charbonneau remained in place until just before Clark’s own death, in 1838.

For all these reasons, although he often was not a sympathetic figure in the pages of the journals, it seems unduly harsh to characterize Toussaint Charbonneau as “good for nothing.” He, no less than Sacagawea, made a significant contribution to advancing the expedition’s objectives at a make-or-break point in the journey. And for that he was indubitably “good for something.”

*Foundation member H. Carl Camp lives in Omaha, Nebraska. For another sympathetic view of Charbonneau, see Rita Cleary, “Charbonneau Reconsidered,” WPO, February 2000.*

*For the record*

An item in the May 2005 L&C Roundup (page 38) mentioned the publication of an article in the Spring 2004 *Journal of the Illinois State Historical Society* about Lewis and Clark’s early plans (later aborted) to locate their first winter encampment near the village of La Charette, Missouri, which at the time was still part of Spanish territory. In citing the author we got his middle initial wrong. He is Donald L. Hastings, Jr.
Rethinking Toussaint Charbonneau

Sacagawea’s “good for nothing” husband deserves more respect than he typically gets

BY H. CARL CAMP

Toward the end of his engaging essay, “Sacagawea and Susan B. Anthony” (Soundings, February 2005), Bill Smith lauds Sacagawea and, like so many others before him, characterizes Toussaint Charbonneau as her “good for nothing husband.” I’m not sure of the particular criteria he has relied on to make that judgment, or whether he may have simply jumped on the bandwagon started long ago by others. I am of the opinion, however, that his dismissive epithet selectively ignores a modicum of evidence that supports, at the very least, a more nuanced assessment of Charbonneau’s relative merits as a member of the Corps of Discovery and of the human race.

There is little doubt Charbonneau could be arrogant, capricious, cunning, abrasive, louche, and abusive, or that he had a pronounced proclivity for womanizing. But was he unequivocally “good for nothing”—utterly without any redeeming attributes? I think not. Here’s why.

Charbonneau first began his affiliation with the expedition at Fort Mandan as a hired interpreter by arrogantly asserting he would not pull guard duty or do menial chores such as rowing, gathering firewood, etc. The captains made it clear the Corps of Discovery was a military unit and he would have to shoulder his share of the day-to-day duties just like everyone else or he would not be retained. Charbonneau withdrew in a huff. After a short time, though, he returned and apologetically asked for reinstatement, thereby accepting the captains’ conditions. He thus demonstrated a measure of flexibility and adaptability, decidedly helpful attitudes to have in a close-knit unit.

Charbonneau was one of three nonswimmers in the corps. He was a confirmed landlubber, but the expedition was primarily a maritime venture, which meant he would constantly be on, in, or near the water. That was enough to raise the anxiety level of any nonswimmer. Although he was demonstrably an inept sailor and prone to panic in emergency situations, Charbonneau somehow managed to suppress his fears sufficiently to function in a largely aquatic environment.

Conventional wisdom has it that “a man’s home is his castle,” meaning he is sovereign within its walls. Charbonneau’s castle on the expedition was his Indian-style lodge (a leather-covered tipi) in which he, Sacagawea, and their infant son, Jean Baptiste, took shelter at each encampment. But they were not alone; Charbonneau had invited Lewis, Clark, and George Drouillard to share it with them. It was a generous gesture Charbonneau was not obliged to make.

Food was a constant challenge on the journey. Various members of the corps specialized in hunting game; others served as cooks and prepared whatever was available for the several messes into which the detachment was divided. Charbonneau’s culinary specialty was *boudin blanc*—“white pudding,” a sausage-like concoction encased in a section of buffalo intestine. In one of his more colorful, and playful, journal entries Lewis wrote in graphic detail about the ingredients and their preparation, and described the presentation of Charbonneau’s signature dish to an always famished collection of hard-working men who clamored for it as long as the expedition was in buffalo country. No matter his notable shortcomings, the hapless Charbonneau could redeem himself through the stomachs, if not in the eyes, of the explorers with bountiful servings of his pièce de résistance.

Because she spoke Shoshone, Sacagawea is rightfully credited with enabling the Corps of Discovery to trade successfully for the horses needed to get across the Bitterroot Mountains and onto the headwaters of the Columbia River. She spoke Shoshone and Hidatsa, but not English and not French.

*Soundings continues on page 43*