Golden Notes

California Chapter
Lewis and Clark Trail Heritage Foundation, Inc.
Keepers of the Story ~ Stewards of the Trail SM

Vol. 7, No. 3
July/October 2007

Of Special Interest

- Fall Meeting in Oceanside
- On The Trail in Washburn, ND
- 1993 Flood changes Missouri River Management Policies
- Fort Union Part 2 "River Transportation"

Inside **Page**

- ✦ On the Trail 2
- ✦ 1993 Flood changes Missouri River Management Policies 3
- ✦ Fort Union Part 2 7
- ✦ President's Notes 9
- ✦ Fall Meeting in Oceanside 10
- ✦ Auburn Photo Collage 11
- ✦ About Us 12

Auburn Meeting Is a Crowd Pleaser

by Ken Jutzi

On April 21, 2007, in spite of a heavy rain storm, fifty-three enthusiasts from across the state, and as far away as Cathlamet, WA, gathered to listen to two members of the Discovery Expedition of St. Charles (DESC) discuss their experiences during the bicentennial.

Sid Stoffels (Garden Valley, CA) and John Hess (Fairplay, CA), also members of the LCTHF and CALCTHF, delighted attendees as they discussed their expedition reenactment experiences, including some behind the scenes activities, and weaved descriptions of expedition related items they brought along into their presentation.

Margaret Miller, traveling all the way from her home in Cathlamet, WA, not only came dressed in her 1796 Empire dress, but she also prepared refreshments that included period food (dried salmon and two kinds of dried berries).

After Sid and John's presentation, numerous discussions broke out as attendees wanted to know more about the expedition related items - including the flint and steel "matches", Lewis's specially designed powder canisters, and John's replica rifles.

Also in attendance was the past president of the Placer County Historical Society, George Lay, who furnished some local wine for door prizes and presented our chapter with a photograph of the recently dedicated plaque in Old Town associated with Jean Baptiste "Pomp" Charbonneau.

A photo collage of this very delightful evening is provided on page 11.

California attendees gather with Lewis & Clark (a.k.a. Bryant Boswell and Peyton "Bud" Clark) on Monticello's south lawn during the 39th Annual Meeting "Reporting Back to Jefferson" in Charlottesville, Virginia

Fall Chapter Meeting

Saturday, 27 October
Oceanside, California

- ✦ Behind the Scenes tour of the San Luis Rey Mission
- ✦ Presentation by the LCTHF on the 3rd Century Campaign
- ✦ Guest speaker: Flight of Discovery
- ✦ Drawing for two Peace and Friendship blankets

(see page 10 for details)

Election Results

Chapter Officers
(Term: 10/1/2007-9/30/2009)
President: Ken Jutzi
Vice President: Robert Allison, Jr.
Secretary: Mary Ann Kvenvolden
Treasurer: Keith Kvenvolden

New Directors at Large
(Term: 10/1/2007-9/30/2010)
Nelson Weller
Nan Kaeser

Number of Ballots Received: 24 (31%)

On the Trail
Cross Ranch State Park
Washburn, North Dakota
August 2006

by Nan Kaeser

A shady forest of tall mature cottonwoods marches inland a quarter mile from the river bluff. These trees form a cool canopy of protection from the hot August sun. Here, a beaver-gnawed cottonwood trunk. There, a bat box adorning another cottonwood which provides a daytime sleeping place for the night workers who keep down the biting insect population.

Alongside this scene, the Missouri River quietly flows around islands and sand bars, is decorated with downed trees and large limbs reaching out to catch unwary boaters. I think of those strong, tireless young men as they strained under the cordelling ropes to pull the expedition's boats along this very bank.

I am strolling in Cross Ranch State Park, North Dakota, adjacent to Cross Ranch Nature Conservancy Preserve. These two strips of land, which share trails between them, run along the western edge of a free-flowing portion of the Missouri River. It looks much as it did during the days the Corps of Discovery moved along here.

Upstream is the gargantuan Garrison Dam which was responsible in the 1950's for inundating a third of the Fort Berthold Indian Reservation. The resulting lake flooded some of the native towns and all the fertile soil. Here live the three tribes the Lewis and Clark expedition worked and socialized with during the winter of 1804-1805.

These cottonwoods I am walking among are home to downy woodpeckers, catbirds, raccoons, beavers, bats and white tailed deer. These trees are the last that will be growing here, for the cottonwoods have evolved within flood areas. They need periodic flooding to germinate. There will be no more floods along here as well as other parts of this river because of the Garrison and other dams on the Missouri.

When you come to North Dakota to visit Fort Mandan and the Knife River Villages, go a few miles down river and spend an hour or a day strolling among the grand old cottonwoods along this unspoiled stretch of the Missouri River.[1, 2]

Nan,
On the Trail

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[1] *Editor's Note (1): Cross Ranch State Park is located along seven miles of the last free-flowing undeveloped stretches of the Lower Missouri River (across the river from Washburn, ND, and 40 miles north of Bismarck, on US 83). The park is rich in both cultural and natural history.*

The park is purposely left primitive to preserve the land's natural beauty. The River Peoples Visitor Center has displays and information about the once mighty Missouri River, which has now been tamed through a series of major dams and reservoirs along its length.

A boat ramp is available for those wishing to explore this scenic segment of the river, while anglers will find walleye, pike and bass in its waters. Canoe rentals are also available.

An extensive trail system can be explored either on foot or on cross country skis during the winter months. During the summer, the trails allow access to a 5,000-acre dedicated nature preserve where mixed grass prairie, river bottom forests and woody draws can be seen. A back country area is open for those wishing to hike to their camping spot.

For additional information visit the park's official web site at http://www.parkrec.nd.gov/Parks/CRSP.htm.

[2] *Editor's Note (2): There is hope that levels of cottonwood regeneration will improve in the future - at least in some sections of the Missouri River corridor.*

The devastating 1993 flood along the lower Missouri forced many government authorities, including the Army Corps of Engineers, to make changes to their river management policies, and these changes have resulted in improved cottonwood regeneration in some areas and the recovery of some lost habitats. To learn more, see John Krist's article on page 3 (opposite).

'93 Flood Focuses River Strategy on Natural Flows Efforts include letting the Missouri River reclaim natural meanderings and floodplains

by John Krist,
Senior reporter,
Ventura County Star [1]

COLUMBIA, Mo. -- In the summer of 1993, the jet stream parked itself over the nation's heartland and began funneling a succession of powerful thunderstorms through the region drained by several key tributaries of the Mississippi River, including the lower Missouri.

Meteorologists call this phenomenon the "train effect." In June and July of that year, the "train" of storms, arriving one after the other, day after day, dumped prodigious amounts of precipitation onto river basins already soggy from higher-then-usual spring rainfall. As a result, record floodwaters surged simultaneously down the lower Missouri and upper Mississippi, blowing out mile after mile of protective agricultural levees and inundating scores of riverfront communities.

At its peak, the flow at St. Louis, 12 miles south of the confluence of the Missouri and Mississippi, was measured at more than 1 million cubic feet a second - enough water roaring past the downtown floodwalls to fill the Los Angeles Coliseum from turf to rim in about a minute.

According to the U.S. Army Corps of Engineers (COE), the floods killed at least 38 people, forced 74,000 to flee, and destroyed or damaged 72,000 homes. Between 35,000 and 45,000 commercial structures were damaged. Millions of acres of cropland were inundated for weeks during the growing season, and thousands of acres of topsoil were washed away or buried by sand and thereby ruined for farming. Total losses were estimated at more than $15 billion. The Federal Emergency Management Agency declared 504 counties in nine states eligible for disaster assistance.

"The flood of 1993 was the worst flood ever experienced by the Midwest. From the standpoint of monetary loss, it was the worst ever in the United States," the COE concluded in its report on the events of that summer. "No other natural disaster in U.S. history affected or touched so many lives for so long a duration."

What the COE didn't realize at the time was that the floods had also damaged two things less tangible than levees but just as important in the Missouri valley's history: unquestioned faith in the COE's ability to control the nation's rivers, and the political willingness to sacrifice fish, wildlife and natural habitat to advance commerce.

One result of this change in perception is visible today along a stretch of the Missouri River shoreline that William Clark described in his journal as a "Delightfull land."

In Harm's Way

The headquarters of Big Muddy National Fish and Wildlife Refuge are in a trailer in a parking lot at a U.S. Geological Survey research station in Columbia, Mo. It seemed appropriate that it was raining heavily outside as Barbara Moran, assistant refuge manager, spread maps and aerial photographs across a table to illustrate how the 1993 floods had changed the way federal agencies approach their management of the Missouri River.

In the wake of the 1993 floods, which the Federal Emergency Management Agency and the COE declared a natural disaster, Congress directed that emergency relief agencies put greater emphasis on "hazard mitigation" - a fancy term for spending millions of dollars to move people and sometimes entire communities out of harm's way, rather than spending billions of dollars to repeatedly rebuild flood-damaged structures. It also meant buying out farmers whose fields might be better suited to growing birds than growing corn.

The policy shift reflected something critics of federal flood-control efforts had been asserting for decades: that what government agencies term a "natural disaster" is often not natural at all; it occurs when human beings place themselves deliberately in harm's way.

Unlike hurricanes and earthquakes, which occur over such widespread areas they can not reasonably be evaded unless substantial parts of the continent are left uninhabited, floods along big rivers are predictable - they occur in the rivers' floodplains.

The floodplains of the Mississippi and Missouri rivers are vast; between Kansas City and St. Louis alone, the Missouri's encompasses 800,000 acres. Both waterways traverse relatively level topography and, in the early 19th century, both meandered a great deal while seeking the path of least resistance from headwaters to mouth. Where the river valleys are wide - as in Iowa, near the present-day town of Onawa, where the Missouri once had 18 miles in which to roam - the rivers made great loops, or bends. One such bend in that area, eventually left behind when the river cut a new channel, is now a lake at Lewis and Clark State Park, where replicas of the expedition's boats are moored.

Besides making numerous twists and turns, the Missouri and Mississippi (and their tributaries) were subject to enormous seasonal fluctuations - a huge rise in spring and early summer, from melting snow and rain, and a great decline in late summer and fall. The plants and animals native to the river basins evolved to cope with and capitalize on that pattern.

Cottonwood trees, for example, produce tiny seeds that float on the floodwaters and are left behind to germinate in rich silt when the water recedes. Native fish, such as the pallid sturgeon and buffalo fish, instinctively sense the coming rise in the river and prepare to spawn, laying their eggs in the quiet sheets of water that spread over the flood plain.

For the farmers and homeowners who followed in the path of Lewis and Clark, however, the spring and summer rise meant flooding - water that drowned crops planted in the rich floodplain soil, water that toppled houses and barns and businesses, water that washed out roads. And so they began demanding that the government do something about it. They were joined by commercial interests that viewed the inconstant waterways as potential shipping channels, if they could only eliminate shoals, sandbars, sunken trees and other hazards, and prevent the rivers from wandering so much.

The result was a vast public-works program intended to harness the river. Similar programs eventually would transform all the rivers Lewis and Clark traveled - indeed, would transform every major river in the West.

The Unruly River

On the Missouri, the COE began small, dispatching "snag boats" in 1838 to remove underwater obstructions to steamboats. Sunken trees, or snags, were a particular threat, frequently impaling and sinking steamers whose pilots could not see them. Historians estimate that during the steamboat era on the Missouri, which ended in the 1880s when the railroad arrived, nearly 1,000 boats went down in the river. Snags sank most of them.

As the steamboat era waned, local residents began lobbying Congress for help of a different kind, according to history professor Robert Kelley Schneiders, whose book "Unruly River" documents nearly 200 years of change along the Missouri.

"These lobbyists did not seek the reestablishment of steamboat commerce, recognizing that the steamers would never return to the lower Missouri as freight carriers," he wrote. "Instead, they wanted the federal government to channelize the Missouri to inaugurate deep-draft barge traffic. Only these barges, with their large cargo-carrying capacities, could conceivably compete against the railroads," which had a monopoly on transportation and could charge high rates.

Congress complied by directing the COE to begin transforming the lower river, defined as the reach between Sioux City, Iowa, and the Mississippi, into a barge channel.

To do so, the COE built a vast system of dikes, gradually confining the river to a narrower, deeper channel armored with rocks against erosion. The COE also straightened the river by cutting off its great bends, or meanders, dredging channels across their necks. The advantage of this had been illustrated more than a century earlier when Lewis and Clark journeyed up the Missouri by boat: After following one loop nearly 19 miles around, they returned on foot and measured the distance across its neck as only 974 yards.

As the Missouri settled into its narrower, straighter course, farmers moved into the floodplain, leveled its forests, built levees and planted crops. Cities, too, crept close to the new shipping channel, building on land reclaimed from the river.

The river corridor had once been a dynamic, chaotic collection of side channels, deep pools, sloughs, marshes, periodically flooded forests, sand bars, oxbow lakes, wet prairies. According to the U.S. Fish and Wildlife Service, the varied habitats supported at least 160 species of resident and migratory wildlife, and 156 native fish species lived in the main river and its tributaries.

Efforts to control the river did away with much of that abundance and diversity.

"Direct losses of at least 103,000 acres of aquatic habitat, 65,300 acres of islands and sandbars, 114,000 acres of seasonal and permanent wetlands, including wet prairies, and 194,000 acres of woodland habitats have occurred in the last century," according to the U.S. Fish and Wildlife Service. "The river has been shortened 127 shoreline miles by channelization. More than 90 percent of the floodplain forests, wetlands and prairies have been converted to agricultural lands."

Despite the COE's effort to make the river navigable, it soon became clear that there was too little water in the Missouri during much of the year to maintain an adequate shipping channel in the lower river. As a result, commercial interests along the lower river began agitating for a network of dams on the upper river to control the flow. Periodic flooding also tore through growing cities

and towns in Iowa, Nebraska, Kansas and Missouri, and the voices of inundated urbanites were added to the chorus calling for dams.

Congress responded, first by approving construction of Fort Peck Dam in Montana during the Depression, and later with the Flood Control Act of 1944, which authorized five huge dams along the Missouri River in North and South Dakota. Built between 1946 and 1963, those dams not only drowned hundreds of miles of the upper river beneath giant reservoirs, they put an end to the seasonal rise and fall of the lower river. Loss of that natural fluctuation contributed to the further decline of wildlife and plants that required periodic flooding to reproduce.

In the decades before passage of landmark environmental legislation such as the Endangered Species Act and the Environmental Policy Act, ecological damage was ignored. Or, if considered, regarded as an acceptable price to pay for the benefits in flood control, navigation and hydroelectric power generation brought by the COE's manipulation of the river.

That equation changed during the flood of 1993.

Giving Something Back

In her office at Big Muddy refuge headquarters, rain spattering the metal roof, Moran displayed maps and aerial photos depicting spots where the federal government purchased farmland, much of it heavily damaged by the great flood of 1993, and allowed it to return to a more natural condition. Workers breached levees so the river could flow back into old side channels and marshes. Volunteers planted vegetation and attacked noxious weeds. In many areas, Moran said, new cottonwoods and willows sprouted on their own.

"It seems very controlled and managed when you look at the river itself, but there's still a lot of wildness in the system," Moran said.

The theory behind the restoration is simple: Natural floodplains allow rivers to spread out and slow down when too much water pours into the system to be accommodated in the main channel. Trying to keep the river confined, as the COE had when it turned the lower Missouri into a barge channel, causes the water to rise higher and move faster during heavy runoff. This puts greater stress on protective levees and contributes to greater damage if they fail.

And as a presidential task force concluded after the 1993 disaster, levee failure is almost guaranteed.

"Floods are repetitive natural phenomena," the Interagency Floodplain Management Review Committee reported in 1994. "Considering the nation's short history of hydrologic record-keeping as well as the limited knowledge of long-term weather patterns, flood recurrence intervals are hard to predict. Activities in the floodplain, even with levee protection, continue to remain at risk."

Flood damage, the committee suggested, could be reduced if the river were given back some of what two centuries of engineering and tinkering had taken from it.

The task force, appointed by President Clinton and chaired by Brig. Gen. Gerald Galloway of the COE, also noted that loss of the floodplains (coupled with elimination of natural flow fluctuations by the big upstream dams) had meant loss of wildlife habitat. This in turn contributed to such great decline in some native species - the piping plover, least tern and pallid sturgeon among them - that they had been listed as endangered.

Even before 1993, federal agencies had begun trying to reverse the decline by restoring natural habitat along the Missouri, but the flooding gave new urgency to the process. It also brought new federal money. Congress made an emergency appropriation even before the water had receded that summer, directing it be used to buy out ruined farmers. Their former cropland was to form Big Muddy National Fish and Wildlife Refuge (established in 1994), joining a score of restoration sites between Sioux City, Iowa, and St. Louis, Mo. Collectively, they are referred to as the Missouri River Fish and Wildlife Mitigation Project.

"The Missouri River mitigation is the process of trying to get back some of what was lost," Moran said.

At Big Muddy, the mitigation project eventually will return some 60,000 acres - about 8 percent of the lower Missouri floodplain - to a more natural state. Whether that will be enough to reduce flooding damage and improve the status of threatened and endangered species is unknown.

"There are so many variables," Moran said.

A "Beautiful Prospect"

Using aerial photos, Moran provided directions to Overton Bottoms, a large tract within the refuge where the COE had breached a levee and allowed the river to have its way. She suggested it would be a good place to see the restoration work in progress and to examine the flood's aftermath.

The site borders busy Interstate 70, just a few miles from refuge headquarters. Near the freeway bridge over the river, gravel roads lead out into the floodplain, which the recent rain had turned into a slippery expanse of sticky gumbo mud - the kind that collects on boots and tires, and forms great clots on every inch of a vehicle's body.

One gravel road ends near a huge "scour hole" created in 1993 when the flooding river crashed through a levee nearby, gouging an enormous pit as it roared through the breach. The hole had since become a pond inhabited by fish and birds.

The air was alive with mosquitoes, and heavy with the smells of decaying vegetation and mud. A dense forest of cottonwoods and willows had sprouted, taking over the sand-buried land where crops had grown just eight years before. Elsewhere, marsh and wet prairie were being established. Tall grasses, wet with recent rain and infested by ticks, drooped in the damp air.

Given the COE's history along the Missouri, the notion that it has begun breaching levees so the river can flood rich bottomland seems little short of revolutionary. Yet environmental organizations are pressing for even more radical changes in river management.

Noting that the COE's own figures reveal that hardly any commercial barge traffic uses the lower Missouri, river activists have suggested that the dams in Montana and the Dakotas should be operated in such as way as to mimic natural fluctuations in seasonal flows - a spring rise and a summer decline - rather than exclusively to benefit nearly nonexistent barges.

According to American Rivers, a nonprofit advocacy group, Missouri River barges carry only 0.3 percent of all the grain harvested each year in Nebraska, Iowa, Kansas, and Missouri, and produce only $6.9 million in annual economic benefits for the basin. On average, the group says, only one to three barge tows per day may be found in the 735 channelized miles of the lower Missouri River.

Like many other organizations, American Rivers seeks to capitalize on the Lewis and Clark bicentennial by dubbing its restoration proposal the "Voyage of Recovery." Besides calling for a return to natural flow patterns (which USFWS also has endorsed as critical to save imperiled species) the campaign proposes additional ecological restoration and urban riverfront revitalization along the entire Missouri.

The COE has spent more than a decade studying possible revisions in its dam operations. So far, it has been noncommittal, suggesting initially that it might be prepared to endorse the concept of a spring rise but then declining to do so in an environmental review of the proposal issued last summer [2001]. The agency is expected to issue a final decision this summer [2002].[2]

Meanwhile, nature continues to reclaim parts of the Big Muddy refuge, a landscape that greatly delighted the usually terse journalist William Clark when he and his companions explored it 200 years ago.

From a bluff in the vicinity, he said, "the most butiful prospect of the River up & down and the country Opsd. presented it Self which I ever beheld; The River meandering the open and butifull Plains interspursed with Groves of timber."

The Missouri will never again be what it was when the Corps of Discovery passed this way - too few meanders and open plains, too many cornfields and gas stations - but hints of its wildness remain. If invited to do so, as it has been at Overton Bottoms, the old river will reassert itself.

And sometimes, as it showed in 1993, it won't wait for an invitation.

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[1] *Editor's Note (1): Anticipating the nationwide commemoration of the Lewis and Clark bicentennial, the Ventura County Star dispatched senior reporter John Krist in 2002 to retrace the explorers' route and examine how the West has changed since they first described it. Summary articles of Mr. Krist's journey were published in twelve monthly installments in the Sunday edition of the Star. The Star also created an excellent interactive website which further documented what John learned during his three-month journey by road, river and trail. It includes historical information, maps, audio clips, video clips, and photos taken along the trail; numerous facts and statistics, such as a list of 126 different products that the Great Plains Indians made from the buffalo; and insightful discussions of many contemporary issues such as the recover of animal populations, loss and restoration of river habitat, and reintroduction of grizzlies, to name just a few. The website also contains many useful resources for further study. To view the results of the entire yearlong project go to www.voyageofrediscovery.com. Also see John's book "Voyage of Rediscovery, Exploring the New West in the Footsteps of Lewis & Clark", iUniverse, Inc., 2004.*

[2] *Editor's Note (2): Cursory research indicates that the US Army Corps of Engineers (COE) is in the process of implementing the "spring rise" concept, starting in 2006. Current status is unknown. For more information see http://www.nwd-mr.usace.army.mil/mmanual/mast-man.htm.*

Fort Union Trading Post
Gem of the Upper Missouri

Part 2[1]
"*River Transportation*"

by Ken Jutzi

Father Jacques Marquette and Louis Joliet were probably the first white men to see the Missouri River. Upon seeing the Missouri's discharge into the Mississippi in 1673, Marquette recorded "I have seen nothing more frightful ...".

The mighty Missouri, 2,950 miles long and draining a watershed of 580,000 square miles, is not only the chief tributary of the Mississippi River but was an 1,800 mile water highway connecting St. Louis and Fort Union.

Keelboats

Keelboats were initially the principal craft conveying trade goods up river and cargoes of furs down river. Such

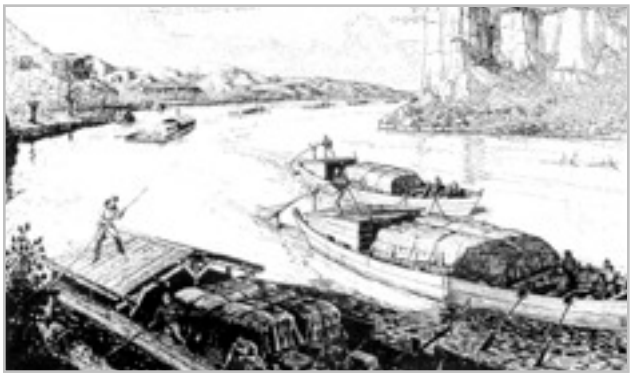
Keelboat on the Missouri River

boats averaged sixty feet long, eighteen feet wide, had a five foot cabin above the deck and cost $2,500 to build. Keelboats featured a sharp bow and stern, with a swivel gun mounted on the bow for protection. These boats each carried twenty tons of trade goods and were pulled, poled, or rowed up the Missouri.

A keelboat crew consisted of a patron or captain, a bosseman or assistant patron, and twenty voyageurs who literally pulled the boat up river. Additional passengers might include hunters and trappers enroute to the mountains. The entire complement was termed a Fur Trade Brigade. The voyageurs pulled the keelboat along by means of a 300-yard cordell rope attached to the upper portion of the boat's mast. The patron kept the boat in the channel, while the bosseman shouted orders and the voyageurs pulled at the rate of fifteen miles per day. It took a keelboat crew six months to travel from St. Louis to Fort Union, and an additional forty days to Fort McKenzie. The trip consumed one boating season.

Mackinaw Boats ... Built for a One-way Trip

Mackinaws represented the cheapest way to transport furs gathered at the up-river posts downstream. Large posts such as Fort Union therefore had chantiers or boat yards for the construction of mackinaw boats. Constructed of



Mackinaw boats took furs, robes and pelts downriver to St. Louis warehouses, where they were then sent on to New York and European markets.

two-inch cottonwood planks, typical mackinaws were fifty feet long and nine feet wide, with three-foot gunwales; they drew thirty inches. They were built for a one-way trip. A mackinaw could carry 300 packs of furs covered with buffalo skins to provide watertight protection. A mackinaw crew consisted of a steersman plus five men. Mackinaws traveled in fleets of six to twelve boats for protection and assistance and averaged 100 river miles per day.

Steamboats

Fort Union, located on the north bank of the Missouri River and about three miles above the mouth of the Yellowstone River, was an active fur trading post for thirty-nine years (1828-1867). Steamboats came to or passed by Fort Union for thirty-five of those years.

Built chiefly for the Assiniboine Indian trade, Fort Union rapidly became a major establishment and the trade goods distributed there reaped large profits for the American Fur Company. However, these profits were heavily dependent upon the river highway and reliable boat transportation.

In a move to improve transportation to its upper river posts and reduce the high costs associated with the use of

keelboats, the American Fur Company built the steamboat Yellow Stone during the winter of 1830-1831.

The idea of bringing a steamboat 1,800 miles up the Missouri to Fort Union is credited to Kenneth McKenzie, the then bourgeois (manager) of Fort Union and head of the Upper Missouri Outfit, a subsidiary of the American Fur Company. Through his long experience in the fur trade, McKenzie realized that Missouri River steamboat transportation could be used to the advantage of the American Fur Company ... and at the expense of its competitors. With the introduction of the Yellow Stone, the era of steamboats serving the up-river posts began.[2]

The Yellow Stone departed St. Louis in April 1831 on its pioneering voyage, but due to the inexperience of its captain in navigating the upper Missouri, the steamboat only reached Fort Tecumseh, in present day South Dakota.[3] In 1832 the Yellow Stone again departed St. Louis in March to take advantage of the upper river's "June rise".[4] Amid great jubilation, the Yellow Stone reached Fort Union on June 16, 1832.

For the next twenty-seven years, Fort Union was the effective head of navigation of the Missouri River. The arrival of the annual steamboat was cause for great celebration among the upper Missouri forts. Each

The Steamer Yellow Stone
(on the 19th of April 1833) (Karl Bodmer)

successive year after 1832, the American Fur Company sent one steamboat per year to Fort Union. This single boat per year became two steamboats in the 1850s, owing to competitive pressures and lucrative government contracts required by Indian treaties.

In 1859, the American Fur Company's Chippewa became the first boat to reach Brule Bottom just below Fort Benton.

From 1860 to the abandonment of Fort Union in 1867, Fort Benton became the final head of steam navigation on the great Missouri.

LaBarge Rock
An Upper Missouri River Landmark

LaBarge Rock was probably named after Charles J. LaBarge, a younger brother of Charles S. LaBarge, the pilot of the Yellow Stone in 1831 and 1832. It's composed of darker igneous rock that formed as molten magma intruded into the white-colored Eagle Sandstone that surrounds it. The landmark is located 56.0 river miles down river from Fort Benton in the Upper Missouri River Breaks National Monument (directly opposite the Eagle Creek Boat Camp).

Next: Part 3 "Fort Union Social Life"

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[1] *This article is based on the National Park Service's information sheet entitled "Fort Union Trading Post, River Transportation", Fort Union National Historic Site, Williston, ND (no date).*

[2] *For an interesting account of the development and use of the Yellow Stone see "Voyages of the Steamboat Yellowstone, The Life and Times of an Early-American Steamboat as It Pioneered on the Upper Missouri River and Played a Major Role in the War for Texas Independence" by Donald Jackson. (Ticknor & Fields, New York, 1985)*

[3] *The pilot's name was Charles S. LaBarge, of St. Louis. In spite of this initial failure, LaBarge's career would last until 1852 when he died in the explosion of the Saluda. (Jackson, "Voyages of the Steamboat Yellowstone", p. 7)*

[4] *Onboard the Yellow Stone for this second voyage was the lawyer turned artist, George Catlin, "who had come west with an unquenchable desire to paint indians and western scenes, and who was traveling at the guest of the company". A year later, in 1833, the passenger list included the scientist and soldier, Prince Maximillian of Weid-Neudweid, and his Swiss artist, Karl Bodmer, who looked "more than a little out of place with his fancy attire, his parasol, and his musical snuffbox". (Jackson, "Voyages of the Steamboat Yellowstone", p. 31 and p. 79)*

President's Notes

As we say goodbye to Summer and anticipate Fall, and our chapter meeting in Oceanside, we should all realize that our Lewis and Clark Community continues to be vibrant. Although attendance at the 39th annual meeting in Charlottesville was down from prior years (I'm told there were about 200 registrations), from my perspective, the event was a big success. And plans for the 40th in Great Falls next year (3-6 August) are already moving along at full speed.

As indicated in the photo on page one, there were several attendees from California, and, for many, it was their first annual meeting. One of the highlights for me was the after hours reception held for us at Monticello by the Monticello Foundation. I'm told we are the only organization they do this for ... which is another indicator of the stature of our Foundation. Unlike the normal tours, we could stroll through the rooms of Monticello at our leisure, and in each room there was a superb docent to describe its contents and answer any questions we had. On the south lawn were tables of hors d'oeuvres, wine and cheese. We stayed until the fireflies began to appear around 9:30 PM. It was a wonderful evening!

As you may have already noticed, this issue of *Golden Note*s is a bit longer than normal and is a double issue covering both July and October. Travel, additional duties associated with being the Foundation's Awards Committee Chair, and the time needed to work out the details for our Fall meeting have necessitated this. As indicated earlier, and on page 10, our Fall meeting will be held on 27 October (a Saturday) in Oceanside, CA. Even from Camarillo I can hear our chapter members in the San Diego area saying - finally a chapter meeting near us! The meeting will include a behind the scenes tour of the San Luis Rey Mission in the morning, prior to our formal gathering. You may recall that Pomp served as an alcalde (magistrate) there in 1847-1848. The cost of the tour is $7 and we must have at least 15. You can pay at the door. Our special guest will be the Flight of Discovery based in San Diego. They are a non-profit group of general aviation enthusiasts and scientists who flew the LCNHT in both directions in 2004 and 2006. Another special guest will be James Brooke, LCTHF board member, who will give a presentation on the Foundation's 3rd Century Campaign.

My thanks again go out to Sid Stoffels and John Hess for their outstanding presentation at our Spring meeting in Auburn. Also, congratulations to our new Directors at Large, Nan Kaeser and Nelson Weller. Thank you for serving!

Ken

Lewis & Clark Statue on the St. Louis waterfront gets a bath (Ken Smith-Camarillo)

A Dozen Canons of Conduct in Life†

1. *never put off to tomorrow what you can do today*
2. *never trouble another with what you can do yourself*
3. *never spend your money before you have it*
4. *never buy a thing you do not want, because it is cheap, it will be dear to you*
5. *take care of your cents: dollars will take care of themselves*
6. *pride costs us more than hunger, thirst and cold*
7. *we never repent of having eat too little*
8. *nothing is troublesome that one does willingly*
9. *how much pain have cost us the evils which have never happened*
10. *take things always by their smooth handle*
11. *think as you please, & so let others, & you will have no disputes*
12. *when angry, count 10, before you speak; if very angry, 100*

†sent by Thomas Jefferson to granddaughter Cornelia in 1811, when she was twelve

Bay Area Book Discussion Group to Meet Again

Come share one of your new or old L&C favorites

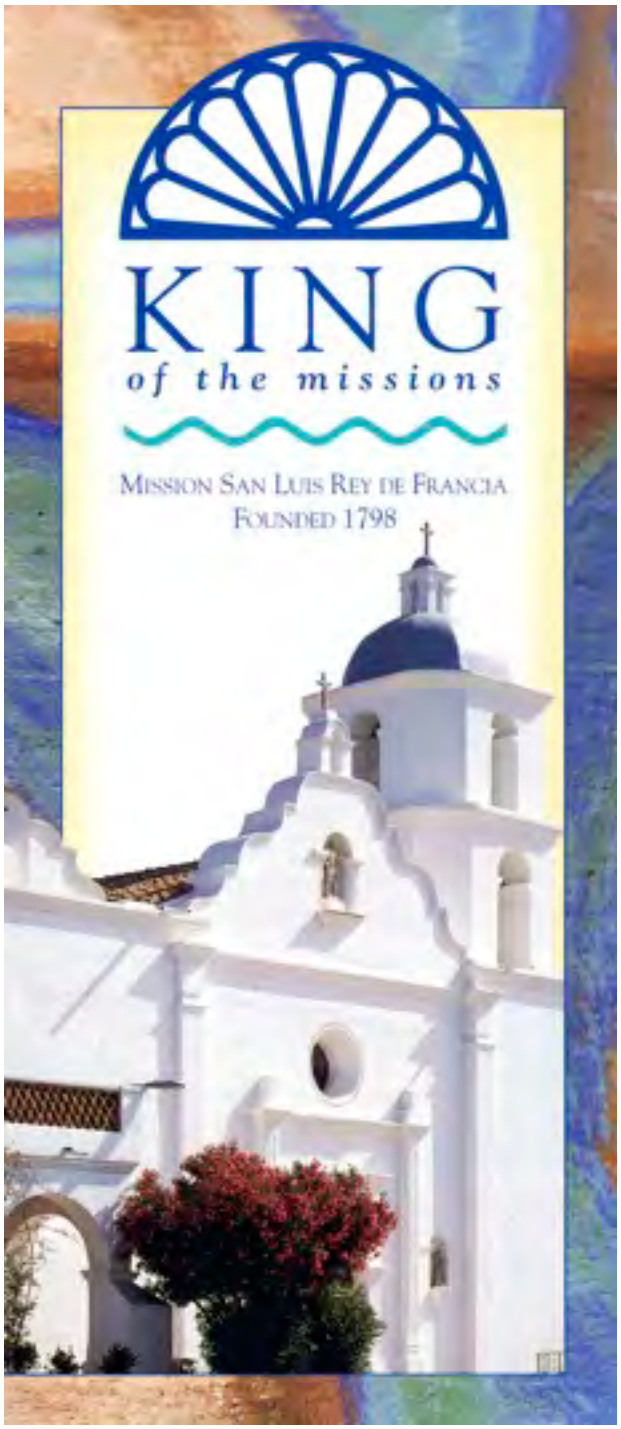
Sunday, 23 September, 2007 (2-4 PM)
Pat Hartinger's Home
16155 Jacaranda Way
Los Gatos, CA
(please call Pat at (408) 356-5363 if you plan to attend)

Fall Chapter Meeting

Public Welcome

Saturday, 27 October 2007
Mission Branch of the Oceanside Public Library
3861 Mission Avenue
Oceanside, California
(directions below)

Public Welcome



Schedule of Events

9:45	Assemble at the San Luis Rey Mission
10:00-12:00	Behind the scenes tour[1]
12:00-1:30	Lunch (on your own)
1:30-1:45	Oceanside Library Chapter Meeting Begins Welcome & Introductions
1:45-2:15	Presentation by James Brooke, 3rd Century Campaign Committee Chair and LCTHF Board Member Topic: 3rd Century Campaign
2:15-2:30	Break
2:30-4:00	Special guest: The Flight of Discovery Topic: Flying the LCNHT
4:00-4:15	Break
4:15-4:30	Drawings for door prizes and two Peace & Friendship blankets[2]
4:30-5:00	Refreshments
5:00	Adjourn

[1] $7 per person at the door

[2] tickets available at the meeting

How to get to the mission:

To get to the Library: The Mission Branch of the Oceanside Library is located at 3861 Mission Avenue. As you leave the Mission parking lot, turn left on Peyri Drive, turn right at the light onto Mission Avenue and then go 0.6 miles. The Library is on the left.

Scenes From Our Spring Meeting
April 21, 2007
Auburn, California















Outstanding examples of expedition related items supplement Sid and John's talk and stimulate much interest and discussion with attendees.


Period refreshments, prepared by Margaret Miller of Cathlamet, WA, delight all.

Photos by Barbara Gaitley, Pat Hartinger, and Margaret Miller

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Keepers of the Story
Stewards of the Trail ℠

Golden Notes is published on a semi-annual (January and July) or quarterly (January, April, July and October) basis depending upon the availability of funding to cover our printing and mailing costs.

We welcome your comments and suggestions. Please send them to CALCTHF, c/o Golden Notes Editor, P.O. Box 1767, Camarillo, CA 93011-1767, or email to calcthf@verizon.net.

Newsletter Editor
Ken Jutzi

About Our Organization

The California Chapter is a non-profit organization. We are dedicated to stimulating public appreciation of the Lewis and Clark Expedition's contributions to America's heritage. We actively support education, research, development, and preservation of the Lewis and Clark experience, and we seek ways to support trail stewardship. We also have fun! To learn more please visit us at: http://web.mac.com/calcthf.

CALCTHF Membership Options

Membership Level	Annual Dues
Student*	$8
Individual	$10
Library/Non-profit	$10
Family/International	$15
Business	$15
Alexander Willard Club	$20
Jean Baptiste "Pomp" Club	$25
Patron Levels	
Heritage Club	$30
Explorer Club	$50
Jefferson Club	$100
Discover Club	$150
Expedition Club	$300
Leadership Club	$500

All new CALCTHF memberships include a copy of the booklet A Charbonneau Family Portrait by Irving W. Anderson. This booklet contains historically accurate biographical sketches of Sacagawea, Jean Baptiste "Pomp", and Toussaint Charbonneau.

CALCTHF memberships also include a subscription to Golden Notes, which will be published at least twice a year. Patron Level members receive their copy of Golden Notes in color. Memberships of more than $10 are tax deductible.

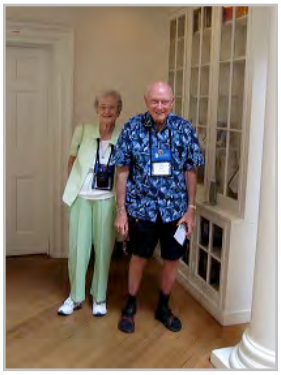
Please send your check or money order to:

Keith Kvenvolden (%CALCTHF)
2433 Emerson Street
Palo Alto, CA 94301-4221

* Full time student (to age 21)

Treasurer's Report

Funds on Hand (as of 7/31/07)
$1,441.94



Carol and Bob Benner (Los Angeles) exploring the Rotunda at the University of Virginia

Laura Fiddler (Northridge) examining a replica of one of Lewis's pistols at the Lewis family graveyard in Locust Hill (Ivy), VA

Presidents Madison, Monroe and Jefferson, along with Lewis and Clark, addressing the audience at the Stonefire Station

Additional Scenes from the 39th Annual Meeting, Charlottesville, VA