

3125 Portia St PO Box 83581 Lincoln, NE 68501-3581

The voice of the Lower Platte. p: 402.476.2729 f: 402.476.6454 www.lowerplatte.org NONPROFIT ORG. U.S. POSTAGE PAID LINCOLN, NE PERMIT NO. 1556





2014 saw the completion of the Lower Platte River Corridor's Water Quality Management Plan. This plan will be fundamental as the LPRCA moves forward in achieving it's mission to protect, enhance, and restore the vitality of the Lower Platte River's resources.

View the document in its entirety at our website.

### **Upcoming LPRCA Events in 2015**

LPRCA Quarterly Meeting- 9 AM January 21st @ LPNNRD in Wahoo NE Check www.lowerplatte.org for updates about upcoming events and meetings

Fall/Winter 2014

### Biannual Newsletter of the Lower Platte **River Corridor Alliance**



#### LPRCA MEMBERS

Lower Platte North NRD Lower Platte South NRD Papio-Missouri River NRD NE Dept of Environmental Quality **NE Health & Human Services** Conservation & Survey Division, **UNL School of Natural Resources** Nebraska Water Center

> Meghan Sittler, Coordinator 3125 Portia, P.O. Box 83581 Lincoln, NE 68501-3581 (402) 476-2729 Fax (402) 476-6454 msittler@lpsnrd.org

Layout, Design, and Editing by: Joshua Price & Meghan Sittler



Louisville, NE in the distance as seen from under the Hwy 50 bridge photo by Josh Price

#### From the Coordinator:

It's hard to believe that another entire year has passed and it's time once again to reflect on events of the past year and look forward to new opportunities in 2015. The LPRCA saw several milestones this year with the completion of an EPA 9 Element Watershed Management Plan for the Lower Platte River Corridor. In partnership with the Nebraska Environmental Trust and USGS, we also completed the development of predictive data for water quality parameters as part of the LPRCA's Water Quality Monitoring Network. We were fortunate to receive support from the National Park Service's Rivers, Trails and Conservation Assistance program to help us further the LPRCA's Recreation Plan for the Lower Platte River. The LPRCA was also fortunate to interact with many stakeholders and members of the public at our three major events—the LPRCA Kayak Tour, Water Quality Open, and the biennial Lower Platte River Summit—and other events and meetings.

This edition of the Platte River Update provides a look back at those important events and our other important milestones. We also look back at the Platte River 300 years ago through the words of an historian and resident of Plattsmouth, NE in our first installment of "Communities of the Platte". We also hear from the Daugherty Water for Food Institute about the innovations around the globe to bring data to agricultural producers, water managers, scientists and citizens to achieve global water and food security. Finally, we take a look at the Great Plains EcoTourism Coalition that is working to connect and promote unique opportunities for economic development while focusing on resource conservation.

## Communities of the Platte: Plattsmouth

Bourgmont, a Cadillac and the Discovery of the Platte River
By Harlan Seyfer, Historian, Plattsmouth Historic District

On June 16, 1714 – 300 years ago – the first Europeans known to set foot in Nebraska arrived at the mouth of the Platte. They were led by a remarkable Frenchman, Étienne de Veniard, Sieur de Bourgmont. During the 1700s France, Britain, and Spain were competing for control of North America. The British colonies clung to the Atlantic coast; New France stretched down the St Lawrence and Mississippi Rivers to New Orleans, while Spain dominated the southwest around Santa Fe and up the California coast. Vast, unexplored lands lay between all three claims.

Étienne Bourgmont was born in 1679 in central Normandy. Nineteen years later (1698) he was caught poaching on the land of the Monastery of Belle-Etoile with his uncle, the village priest (!). To avoid paying the 100 livres fine, Bourgmont fled to North America.

Bourgmont next appeared as a hunter near Fort Detroit in 1703. Two years later he was appointed an ensign in the *Troupes de la Marine* by Antoine Laumet, Sieur de Lamothe Cadillac, and a little later given command of Fort Detroit, which Cadillac had founded (thus the automobile name).

When Cadillac returned seven months later, he found that Bourgmont had withstood a siege by Fox Indians with a garrison of only 15 soldiers. Bourgmont would have been ahead if he had stuck around for the praise due him. Instead he deserted, taking with him the wife of another officer.

Bourgmont and his paramour lived as rough, unlicensed traders around the western shore of Lake Erie. After a year, the lady left him.

In 1712 he joined the Algonquin and Missouri Indians in defeating the Fox near Fort Detroit. After the fight, he followed the Missouri back to their home in present-day mid-Missouri, where he married a chief's daughter.

Meanwhile, Cadillac, now Governor of Louisiana, had not forgotten his young protégée. Indeed he could not: a warrant for Bourgmont's arrest had been issued by King Louis XIV. Cadillac chose to ignore it. Instead in 1713, Cadillac offered Bourgmont a pardon – if he would undertake a mission for him. Cadillac financed Bourgmont to purchase trading goods and hire *engagés* to map the Missouri River and win over the tribes along its course for Cadillac's fur trade interests. Thus, with a handful of men, Bourgmont reached the mouth of the Platte on June 16, 1714.

Upon his return, Bourgmont wrote two reports mentioning the Platte in both. In *The Exact Description of Louisiana* he wrote:

"Upstream is the wide river called by the French and by the Indians the Nibraskier, a tributary that flows from the northwest and west-northwest. Ten leagues up [this river] are the Maquetantata, a tribe allied with and friendly to the French. They are on the bank of a small river whose water is salty and from which they make salt. All the trade of these Indians is in peltries."

This is the first recorded use of *Nibraskier*, the Otoe word for "flat water," later translated by French traders as *Rivière Platte*. The *Maquetantata* were the Otoe Indians on today's Salt Creek in Lancaster, Cass and Saunders counties. When he mentions "the French" Bourgmont may be referring to himself. Bourgmont's second report was his navigation log, recording compass headings, distances travelled, and

Bourgmont's second report was his navigation log, recording compass headings, distances travelled, and landmarks:

"Saturday 16 [June, 1714] North one league; at the start an island of half a league; to the west a prairie of one league, at the end of which the [Nibraskier] is found. Its mouth is wider than the Missouri at that point."

Both reports were forwarded to Paris, where they were used to create the first map to definitively show the mouth of the Platte. Accompanying these reports was a recommendation that Bourgmont receive the Cross

# LPRCA Receives Technical Assistance Grant from the

### **National Park Service**

by Kim Shafer, National Park Service Rivers, Trails, and Conservation Assistance Program

The Lower Platte River Corridor Alliance (LPRCA) has received a technical assistance grant from the National Park Service to support its efforts in furthering the development of recreational resources along the Platte River. Through the Rivers, Trails, and Conservation Assistance (RTCA) Program, the National Park Service helps communities and neighborhoods to preserve valuable open spaces, revitalize nearby rivers, and develop trail and greenway networks. Projects are locally conceived and initiated, with RTCA staff supporting community-based recreation and conservation leaders.

With the recent completion of the Lower Platte River Corridor Recreation Study in cooperation with the United States Army Corps of Engineers and the Nebraska Game and Parks Commission, the Alliance is looking to the next steps in implementing the plan. NPS assistance will focus on working with the LPRCA to identify and build partnerships for recreational development and conservation work in the Lower Platte River watershed. In addition to identifying opportunities for public access and delineation of a Platte River water trail, the partnership will seek out new opportunities and methods for community engagement and watershed education.

The recreation study includes identification and analysis of areas with high recreation potential and minimal risk of impacts. Water trail planning includes a series of phases: planning, inventory, access, implementation, promotion and operation and maintenance. The National Park Service has a variety of resources available to guide communities in many aspects of water trail development, but the best tool available is a dedicated and energized group of stakeholders to lead the way.



### What is a Water Trail?

A water trail, or blueway, is a stretch of river, a shoreline, or an ocean that has been mapped out with the intent to create an educational, scenic, and challenging experience for recreational canoers and kayakers. The trails are organized by local volunteers with the help of public officials and private landowners, all of whom promote its proper use and maintenance.

For communities across the country, water trails are a flexible and responsive tool for promoting a healthy economy and a high quality of life while preserving our natural and cultural heritage. Water trails, such as the Kansas River Water Trail and the Mississippi River Water Trail, can energize individuals and unify communities.



### 2014: Our Year In Review

# Lower Platte River Summit



Dave Sands from the Nebraska Land Trust gives a presentation at the Kennedy Farm

The 2014 Lower Platte River Summit was held on November 6th, 2014 at Camp Carol Joy Holling's New Hotel Theodore Facility. Chuck Schroeder, the Executive Director of the Rural Futures Institute at the University of Nebraska, provided the keynote presentation to start the day. Mr. Schroeder gave a very motivating presentation about the resiliency of communities throughout the corridor and similar regions in the Midwest. The keynote presentation was followed by a facilitated panel discussion that covered a variety of topics including

development, public health and water quality, recreation, industry, and others. The discussion panel led way to small group discussions focused on a newly developed discussion tool known as "Plainsopoly"

which uses hypothetical situations on a diverse landscape to get participants to think about and discuss barriers and opportunities in land use issues in both rural and urban environments.

Lunch concluded our time at Camp Carol Joy Holling which was followed by an afternoon bus tour of the Kennedy Farms and historic Plattsmouth Nebraska. Dave Sands from the Nebraska Land Trust as well as members of the Kennedy family, gave a history of how the easement process works and some of the unique attributes specifically incorporated into the Kennedy farm easement. We then boarded the bus and were off to our next stop on the tour; Plattsmouth, NE.



Chuck Schroeder of the Rural Future Institute gives his keynote presentation

In Plattsmouth we heard from historian Harlan Seyfer on the origins of Plattsmouth and from Charles Jones, the Executive Director of the Plattsmouth Mainstreet Association, who presented the



Attendees walk Plattsmouth's Historic Main Stree

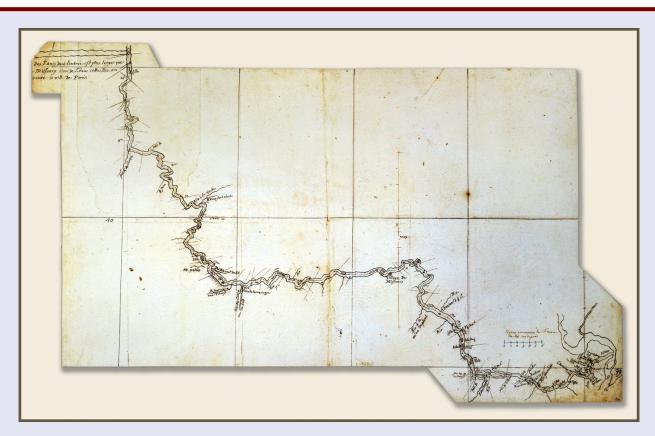
unique historical features of Plattsmouth as well as the recent and future renovations being undertaken to build upon these features while simultaneously preserving them. We concluded our time in Plattsmouth with a short visit to the Cass County Historical Society before heading back to Camp Carol Joy Holling to conclude the day's events.

To all that contributed and participated, we thank you for making this year's Summit a successful and engaging experience.

#### Continued from previous page

of Saint Louis, the highest decoration the king could bestow. With that honor came a full pardon (Louis XV was now on the throne) and appointment as "Commandant of the Missouri River." Bourgmont went on to serve his colonial government as explorer, intelligence agent (mostly against the Spanish) and ambassador to the Indian tribes.

Bourgmont died peacefully on his Normandy estate in December 1734.



The French geographer Guillaume De L'Isle used the written reports of Bourgmont's ascent of the Missouri to construct this detailed map of the river in 1716. It was the first reasonably precise map of the Missouri drawn from exploration. The map extends from the Mississippi, at bottom right, to the Platte, at top left. The mouth of the Platte (located for the first time on any known map) is sketched in, since Bourgmont's journal stopped abruptly at that point.

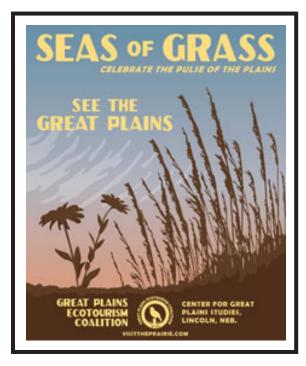
The rather strange shape of this map resulted from the addition of extra pieces of paper at both ends, presumably when De L'Isle realized his map was not going to fit on the original sheet. De L'Isle's hand-drawn map was not published in his or Bourgmont's lifetime. In the 1720s it was filed away in the French Naval Museum archives; there it lay hidden until rediscovered in 1979.

Map courtesy of Derek Hayes, Historical Atlas of the American West (Berkeley: University of California Press, 2009), p. 53.

**About this article:** As a new addition to our newsletter the LPRCA is hoping to run a regular column introducing our readers to the communities within the lower Platte River corridor. If there are specific locations you wish to know more about or if you have affiliation with a community in the corridor and wish to contribute to future newsletters please feel free to contact us. Contact information is provided on the back page.

See the Great Plains: an Ecotourism Strategy for Grasslands Conservation

By Kat Shiffler, Great Plains Ecotourism Coalition



In the 1930s, during the worst years of the Great Depression, President Franklin D. Roosevelt launched a New Deal program called the Federal Art Project to help put the nation's artists to work. The program resulted in thousands of poster designs, many of which promoted the national parks. The campaign was called "See America" and it was a call for tourists to get out and connect with spectacular natural areas across the country, including the remarkable places found in our own backyards.

Today, in Nebraska and in the broader Great Plains region, a similar branding and marketing effort is underway. The Great Plains Ecotourism Coalition is a group committed to promoting environmental conservation and building thriving communities through nature-based tourism in the Great Plains. Coordinated by the Center for Great Plains Studies (CGPS) at the University of Nebraska Lincoln, the group celebrated its launch in early November along with the "See the Great Plains" poster series featuring

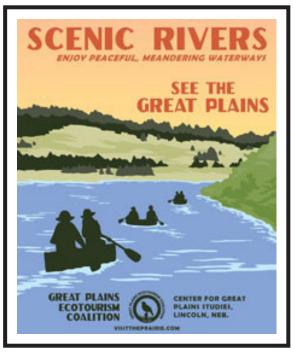
landscapes and wildlife emblematic of the region's natural marvels. Prairie chickens, the starry night sky, peaceful river journeys, the crane migration, a prairie meadow and long-distance bike trails are some of the images meant to entice visitors to explore a region that is clearly so much more than "fly-over" country.

The Great Plains Ecotourism Coalition (GPEC) grew out of the Center for Great Plains Studies' long-standing promotion of ecotourism as a grasslands conservation strategy. The Center's director, Dr. Richard Edwards, was initially inspired by first-hand experience with highly

successful ecotourism-driven conservation models in Namibia and Botswana. In these southern African examples, high-value, low-volume ecotourism incentivizes privatelandowner conservation, contributing to stable or growing wildlife numbers, thriving human communities and a broad consciousness of the economic and aesthetic value of their natural environment.

The Coalition is working to produce a similar win-win-win scenario closer to home. Yet, for the potential visitor, the ecotourist, how does one get to know the natural beauty of the Great Plains? The Center started to answer this question with the publication of a map highlighting the top 50 ecotourism sites in the Great Plains. The map included public and non-profit sites like the Oglala National Grasslands, the Crescent Lake National Wildlife Refuge, the Niobrara National Scenic River, the Nature Conservancy's Niobrara

Continued on the next page



## **2014: Our Year In Review**

# KAYAK TOUR







On September 17th, the LPRCA held the "make-up" date for the Kayak Tour that was postponed due to weather in June, earlier this year. It turned out to be a gorgeous fall day and we had plenty of water due to the September rains throughout the area. Participants had a quick trip on the water due to the flows. Following the paddle from Schramm to Louisville, participants heard about Nebraska's threatened and endangered species from Carey Grell, NGPC; DNR's INSIGHT from Jessie Wietiens of DNR; and about water quality concerns from Chris Madden of the Nebraska Watershed Network. Meghan Sittler, LPRCA Coordinator, also provided some information about LPRCA projects and efforts. There was a lot of great discussion by the diverse group of participants and was another successful opportunity to engage people in the lower Platte River and the LPRCA.



## **2014: Our Year In Review**

## <u>Water Quality Open</u>



The Water Quality Open was held Thursday, August 28th at Quarry Oaks. The keynote presentation was given by Dr. Carrick Detweiller of the University of Nebraska-Lincoln Computer Science and Engineering Department. Dr. Detweiller discussed the work he has done through leading an initiative to utilize aerial robotic technology within water sensing and sampling. The presentation was very well received with a good discussion session. Thirty-six foursomes then spent the day on the course where we had presentations by the Nebraska Invasive Species Program, USGS, the Department of Natural Resources, the Nebraska Land Trust, and the Daugherty Water for Food Institute and the Nebraska Watershed Network. It was once again, a successful and popular event!

We appreciate NEBCO and our many sponsors for making this event possible.







Continued from previous page

Valley Preserve, and Audubon's Rowe Sanctuary. The Switzer Ranch and Nature Reserve, near Burwell, was the lone privately owned ecotourism enterprise that made the map. In the summer of 2014, project consultant Kat Shiffler hit the road to survey other private operations in Nebraska, see what was out there, and create a series of case studies to understand opportunities and challenges for the sector's expansion.

These case studies were in large part the inspiration behind the "See the Great Plains" posters, designed by CGPS Communications Coordinator, Katie Nieland. As the posters begin to appear across the state, the Great Plains Ecotourism Coalition expands its reach. GPEC is working on a number of academic projects that resulted directly from case study interviews with landowners and a new guidebook to Nebraska ecotourism will be published in 2015.

Coalition members believe that ecotourism can be more than an interesting vacation option, but it can, in fact, help save the Great Plains' remaining virgin prairie. A biosphere of global importance, the Great Plains is one of only four remaining intact temperate grasslands in the world. Yet from the STARRY SKIES

SEE THE MILKY WAY LIKE NEVER BEFORE

SEE THE GREAT PLAINS

GREAT PLAINS

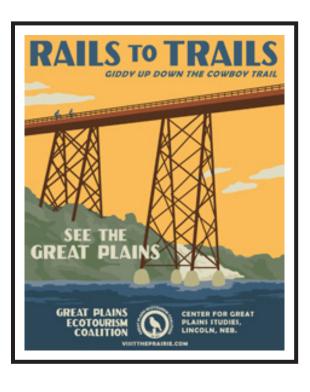
COALITION

VILITARIDEASHIE COM

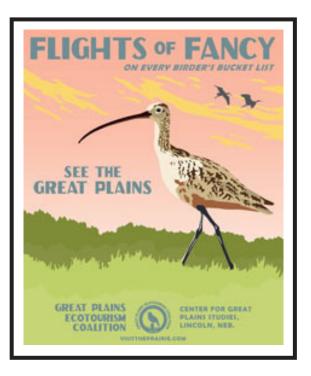
COALITION

VILITARIDEASHIE COM

homesteader's plow to modern day demand for agricultural commodities, the sea of grass has shrunk to a mere fraction of its earlier size. Martha Kauffman, managing director of the World Wildlife Fund's Northern Great Plains division calls it one of "the world's most threatened natural systems," ranking it alongside the Amazon and the Arctic.



"Great Plains prairies can be the source of endless fun and wonder," said Edwards. "If we do it right, our enjoyment can also be the engine of their survival."

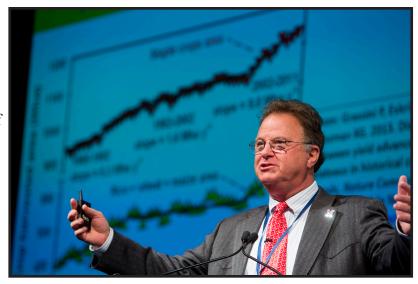


# 2014 Water for Food Global Conference Addresses Data's Role in Global Water and Food Security

by Molly Nance and Dana Ludvik, Robert B. Daugherty Water for Food Institute at the University of Nebraska

The challenges to feeding a rapidly growing world population are imposing, but the collective effort of a dedicated group of people can change the course, creating a more promising future. To help develop solutions for producing more food with less stress on water resources, the Robert B. Daugherty Water for Food Institute (DWFI) at the University of Nebraska convened its sixth Water for Food Global Conference Oct. 19-22 in Seattle, Washington. The conference, held in association with the Bill & Melinda Gates Foundation, provided a forum for world leaders to explore data's role in global water and food security.

The recent explosion of data in the areas of water, agriculture and climate offers great potential to improve livelihoods. The combination of new



and complex sets of data — from web and mobile phone communications to digital instrumentation and remote sensing, together with the invention of greatly enhanced data processing capabilities — is opening up new possibilities for better data-driven analysis and decision-making.

"Harnessing the Data Revolution: Ensuring Water and Food Security from Field to Global Scales" brought together more than 250 scientists, policy analysts, farmers, students, philanthropists, business representatives and government and non-governmental organization leaders from 23 countries to discuss new research and projects in data-gathering technologies to conserve water and improve crop yields for farming operations, large and small, around the world.

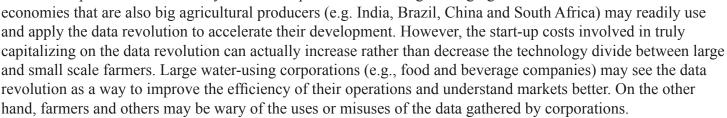
Data, if effectively harnessed, can transform farming from a labor-intensive, high-risk endeavor to a knowledge-based, strategic production that manages risk. In high-tech contexts, for example, data generated by IT-aided tractors, irrigation equipment and other machinery are used to increase productivity through precision agriculture. These data-driven techniques enable farmers to reduce inputs, including water use, helping agricultural systems become more efficient and sustainable. Furthermore, the availability of large volumes of data from multiple sources could greatly enhance analysis and learning to reveal critical relationships that could vastly improve our understanding of agricultural water management and other critical determinants of water and food security.



In developing countries, there are important opportunities for the data revolution to enable farmers to "leapfrog" past older and costlier technologies. For example, remote sensing and high-resolution digital soil mapping could enable farmers to leapfrog over land-based data gathering of soil conditions, in the same way that cell phones have leapfrogged over landlines in many low-income countries. And data from cell phones, commerce and social media, coupled with hydrologic and climatological data, could be used for better early drought detection.

The conference also revealed new and complex challenges of managing data in food production. It is proving difficult to derive useful information from the vast data available for policy and practice. We have much better indicators and data on productivity than on sustainability, which means more work will be required to define good indicators for sustainability and collect the right data. Getting farmers to use data to improve their operations will require education, training, and agricultural extension – which will be very challenging in those countries where these services are already limited.

The opportunities and challenges of the data revolution vary based on context and points-of-view. Policymakers and practitioners in large emerging economies that are also big agricultural producers (e.g. India, Brazil, China and Sout



Among the many high-tech tools discussed at the conference, a highlight was the launch of the Global Yield Gap and Water Productivity Atlas led by the University of Nebraska-Lincoln and Wageningen University in the Netherlands. The Atlas is the first transparent, interactive and map-based web platform used to estimate exploitable gaps in yield and water productivity for major food crops worldwide. Researchers around the globe are using a bottom-up approach to gather and analyze satellite, atmospheric, soil and historic data to identify these gaps, helping individual countries better identify production potential to improve policies, increase food production, conserve water and better strategize resource allocations.

To learn more about the conference and its outcomes, view full presentations on our YouTube Channel and read additional articles on the Water for Food Blog. Full proceedings for the event are expected to be published in early 2015 and will be available on our website, www.waterforfood.nebraska.edu.



