



MVAC at the University
of Wisconsin - La Crosse
1725 State Street
La Crosse, WI 54601

www.uwlax.edu/mvac

**This year's theme:
Native American
use of the
Mississippi River**

This year we continue publishing our MVAC Education newsletter in a digital format. Each issue will include content information, lesson plans and resources for teachers to use in their classrooms. The digital newsletter format will be issued three times a year.

*Content information for this year's topic comes from **Twelve Millennia** by James L. Theler (UW-La Crosse) and Robert F. Boszhardt (MVAC).*

Please let me know if you comments on the newsletter's content and/or suggestions you have for new material to include. You can contact me at dowiasch.jean@uwlax.edu or (608) 785-8454. Enjoy the newsletter!

Jean Dowiasch, Editor

Archaeology Education Program

Volume 22, Number 2

Fall 2004

Native American use of the Mississippi River

Introduction

The process by which the Mississippi River Trench was formed affected the resources that were available to the Native Americans when they arrived in the Midwest. For thousands of years after its formation, the river played a vital part in Native American cultures.

How was the Mississippi River Formed?

The Pleistocene is the time between two million and 11,000 years ago when the earth's atmosphere cooled, permitting the development of huge amounts of glacial ice. The cycles of the Pleistocene carved the Upper Mississippi Valley into a deep gorge, and the Driftless Area valleys became deep and narrow. As the glaciers advanced and retreated, there were a number of times when glacial melt waters were dammed behind sediments or moraines, forming huge glacial lakes. During these times Lake Superior was twice as large as it is today. When these natural dams were breached the lakes drained rapidly, in catastrophic floods that swept down the Mississippi Valley. Water scoured and eroded the Mississippi River trench, picking up sediment outwash and debris along the way. In softer sandstone the trench was carved wider than with dolomite, which explains why the river is approximately 10 miles wide at La Crosse and at Prairie du Chien it's only about two miles wide.

After the last glacial meltwater flood nearly 9,500 years ago, the Mississippi River began to carve new channels in the fresh sediments, leaving a series of glacial outwash terraces of sand and gravel, that had been the river bed during glacial meltwater floods. The river flowed from bluff to bluff with water spilling into tributary valleys. As the water receded, deposits of sediment fell into interior valleys, including clay used for pottery.

Driftless Area

The Driftless Area encompasses roughly 15,000 square miles of land in portions of western Wisconsin, southern Minnesota and northern Iowa and Illinois. This part of the Midwest was not compressed by the weight of the glaciers/ice sheets slowly advancing and retreating into surrounding areas, allowing Native people to first enter Wisconsin.

Driftless Area land forms

As a result of the Mississippi River formation, the Driftless Area was divided into four basic land forms/biotic communities: bedrock uplands, steep-sided interior valleys, outwash terrace, and floodplain. Each community supported various types of plants and animals which provided food for Native people, and are therefore considered economic resource zones. In prehistoric times each zone would provide different resources, and would be seen quite differently than they are today. Resources provided by each land forms will be discussed in the Winter 2005 issue of the Archaeology Education Program newsletter.



MVAC at the University
of Wisconsin - La Crosse
1725 State Street
La Crosse, WI 54601

www.uwlax.edu/mvac

The activities on this page will help your students examine the Mississippi River, its tributaries and resources.

Answers:

1. Falls of St. Anthony
2. St. Croix River
3. Cannon River
4. Lake Pepin
5. Chippewa River
6. Buffalo River
7. Trempealeau River
8. Mississippi River
9. Black River
10. La Crosse River
11. Root River
12. Bad Axe River
13. Upper Iowa River
14. Kickapoo River
15. Wisconsin River
16. Turkey River
17. Grant River
18. Platte River
19. Apple River
20. Rock River

Mississippi River Activity

LESSON PLANS

The Mississippi River and its Tributaries

The map below show the Mississippi River as the center of the Mississippi River Valley. While the Mississippi River provided early Native cultures with the majority of their food resources in the summer, winter campsites were located in the interior valleys using the tributaries of the Mighty Mississippi as a source of fresh water when the Mississippi River was frozen. To help understand the extent of the Mississippi River and its tributaries, have students label the rivers and lakes below.

Instructions:

List the numbers 1 - 20 on a sheet of paper. Write the river's name next to the appropriate number. Each name is used one time only.



- Apple River
- Bad Axe River
- Black River
- Buffalo River
- Cannon River
- Chippewa River
- Falls of St. Anthony

- Grant River
- Kickapoo River
- La Crosse River
- Lake Pepin
- Mississippi River
- Platte River
- Rock River

- Root River
- St. Croix River
- Trempealeau River
- Turkey River
- Upper Iowa River
- Wisconsin River

Mississippi River Resources

Book Review

Title: Twelve Millennia

Author: James L. Theler and Robert F. Boszhardt

Publisher: University of Iowa Press, 2003

Age Range: high school - adult

The authors provide an excellent overview of the Driftless Area of the Upper Mississippi River Valley. In addition to introducing how the Mississippi River was formed and what climatic changes occurred in the upper Midwest, the resources used by early Native Americans are expertly outlined by time period.

Fur Trade Resource Box

This assortment of book sets, bulletin board displays, videos, furs and skulls provides students a chance to wonder at the materials early Native Americans and the first Europeans in the area used for clothing and the wide variety of animals available for food along the Mississippi River and its tributaries. MVAC will rent out this resource box, created for students in grades 3 - 5, to educators on a monthly basis for \$30/month. To reserve the Fur Trade resource box for your classroom, contact Jean Dowiasch at (608)785-8454 or dowiasch.jean@uwlax.edu.



River resources used in prehistoric times. Column 1 (top to bottom): beaver jaw, goose bone, goose wing bone made into whistle; Column 2 (top to bottom): 2 rows of fish scales, 3 fish jaws, mussel shell; turtle shell.

Places to Visit

Upper Midwest Environmental Sciences Center

The Upper Midwest Environmental Sciences Center is a research facility of the US Geological Survey. Research is conducted primarily on the Mississippi River from St. Louis to Minneapolis. The Center offers a variety of educational opportunities for teachers and students. River resources are available on the UMESC web site, and tours are available with an Indoor Learning Lab, an Outdoor Classroom and displays in the foyer. Located at 2630 Fanta Reed Road, La Crosse, WI 54603. Web site: <http://www.umesc.usgs.gov/>; (608) 783-6451.



MVAC at the University
of Wisconsin - La Crosse
1725 State Street
La Crosse, WI 54601

www.uwlax.edu/mvac

The book review, resources, and places to visit can be used as supplemental information for your lessons. Let us know if you have found any great resources we can share with our readers.

Archaeology in the Classroom

Experience archaeology, then use it to integrate your curriculum.

A professional development opportunity for middle school teachers. This project is funded by a Wisconsin ESEA Improving Teacher Quality Higher Education Program.

Like many people you have probably always enjoyed hearing about the latest discoveries in archaeology. You may have even dreamed of participating in an actual excavation. However, you've put off exploring archaeology due to cost, time constraints, or lack of connection to your professional life.

Well, here's a fantastic opportunity to learn about archaeology, participate in an actual excavation, relate this knowledge to your own classroom, and earn 9-12 tuition waived graduate credits!

We are looking for a limited number of 4-8th grade teachers who are passionate about learning and teaching, eager for a new experience and currently teaching in a public or private school in Wisconsin. MVAC at UW-L has just received a two-year *ESEA Title II* grant to train teachers to create an inquiry-based integrated (science, math, language arts, social studies) curriculum that will be posted to the Internet, and to design a web-based course for future teachers. Project participants may have varying levels of archaeological knowledge, from teachers who have never taken an archaeology course to those who have participated in field work. Whatever your experience level, there's a place in this project for you.

What participating teachers will receive:

- Nine to twelve tuition waived graduate credits (districts vary so check with your district to see if you can use the credits to move on the pay scale), and resource materials totaling \$100-200
- Hands-on archaeology experience in the field and lab
- Opportunity to develop integrated, inquiry based curriculum linked to the state standards
- Opportunity to use technology to complete course work and interact with other teachers from across the state

Project timeline:

- Contact project directors with questions and submit your application as soon as possible.
- Applications must be received by **Nov. 22, 2004**. Participants will be selected and notified by Dec. 10, 2004.
- Teachers' with no prior archaeology experience will begin in Jan. 2005 and end in Dec. 2005.
- Teachers' with prior archaeology experience will begin in May 2005 and end in Dec. 2005.

For additional information visit:

<http://www.uwlax.edu/mvac/EventsDisplays/teacher.htm>

Submit application to:

Bonnie Christensen
MVAC at UW-L
1725 State Street
La Crosse, WI 54601

or:

christen.bonn@uwlax.edu



MVAC at the University
of Wisconsin - La Crosse
1725 State Street
La Crosse, WI 54601

www.uwlax.edu/mvac

Teacher Application

Submit the following information along with an essay of 75 words or less telling what you would hope to get out of participating in this project. **Applications must be received by November 22, 2004.**

Your name
Grade teaching
School name
School street address
School city, state and zip
Daytime phone number
E-mail address

Announcements



MVAC at the University
of Wisconsin - La Crosse
1725 State Street
La Crosse, WI 54601

www.uwlax.edu/mvac

La Crosse School District Funds

Each elementary and middle school in the La Crosse School District has been awarded \$200 to use toward MVAC resources. Special thanks to Mark White and Sandra Brauer, the district's Supervisors of Humanities for their continued support of this program. Teachers interested in using the funds can contact Jean Dowiasch at (608) 785-8454.

Matching Funds Grant

The UW-La Crosse Foundation has awarded MVAC a \$2,400 grant to help teachers "double their money" when using MVAC's educational resources. Application forms to apply for the grant are on the MVAC web site under the **Educators** section. Teachers who would like more information on this program can contact Jean Dowiasch at (608) 785-8454.

MVAC's Archaeology News on the Web

The newsletter for the general members of MVAC is also on the web. Pdf files for the regular newsletter and our Online Supplement can also be viewed by following the links from the front page of MVAC's web site. The most up-to-date news on recent excavations, western Wisconsin archaeology, newly discovered artifacts and upcoming events are all on the web for your convenience!

Upcoming Events

Unless otherwise noted, events are free and open to the public. Contact MVAC at (608) 785-8454 for more information.

Laboratory Work Day

Saturday, November 6, 2004
9 a.m. - 4 p.m.
Archaeology Center and
Laboratories, UW-La Crosse

MVAC members and field survey participants are invited to join Connie Arzigian for a day in the lab, washing and sorting artifacts recovered during the Public Field Survey in May.

Registration **required** at
608-785-8454 or
dowiasch.jean@uwlax.edu

Highlights of MVAC's Summer Excavations

Tuesday, November 16, 2004
7 p.m.
Port O'Call, Cartwright Center,
UW-La Crosse

Wendy Holtz-Leith will discuss MVAC's excavations of 3rd and 4th Streets in the city of La Crosse. The project is within the Sanford Archaeological District, a large Oneota village complex.

Dr. Jim Theler and Bob Cronk will present the UW-L College Field School's three weeks in the Bad Axe Valley of Vernon County. Dr. Connie Arzigian and Mandy Georgeff will discuss the College and Public Field School's findings at 47Lc333, an Oneota site in Long Coulee near Holmen.