

# In the Footsteps of Lewis and Clark

**Steve F. Russell**  
**Iowa State University**

**Presented at the Museum of the Rockies, Bozeman, Montana**  
**by invitation of the Headwaters Chapter of the**  
**Lewis and Clark Heritage Foundation**

**August 16, 2004**

# Clark – The Map Maker



**Lolo Creek and Hungary Creek in the  
Bitterroot Mountains of North-Central Idaho**



# Lewis – The Naturalist



**Clarkia or “Pinkfairies” or “Ragged Robin”** *Clarkia pulchella* (Pursh)



# My Interests and Goals





# Interests and Goals

- **Scholarly research on historic trails with original journals, original maps, and field work**
- **Work with state and federal agencies on historic preservation**
- **High-accuracy GIS results using ARCVIEW and GPS**
- **Natural history documentation: geology, plants, animals**
- **Archival results: publications and documentation in state historical society journals**



## Steve F. Russell on The Lewis and Clark Trail





# Research Methodology

- **What I do**

- Document the history and location of historic trails
- Apply the best technology and academic research methods available

- **How I do It**

- Use original journal and map sources from the National Archives and other research libraries
- Apply computer technology to the journals and maps to determine the best probable location of the trails
- Dedicate summer months to extensive field work (exploring and camping)
- Create detailed maps of the trail location using geographic information system technology
- Document the results by various archival means



# Land of the Nez Perce



Ancient Rock Cairns



# Camping With the Nez Perce





# Results and Activities

- Books
- Monographs
- Journals
- Workshops
- Presentations
- National Media
- Web Sites

# Books

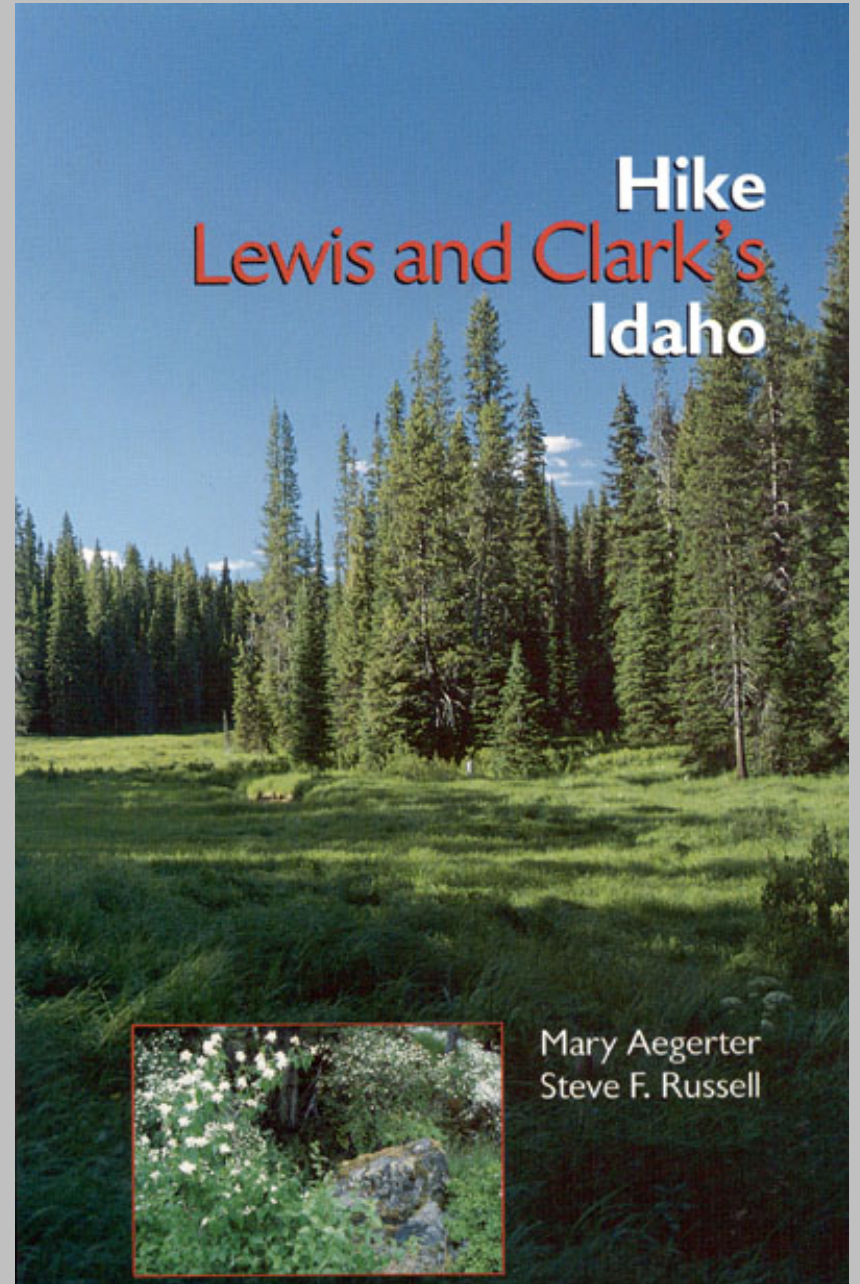
## ACROSS THE SNOWY RANGES

*The Lewis and Clark Expedition  
in Idaho and Western Montana*



WRITTEN BY JAMES R. FAZIO  
PHOTOGRAPHY BY MIKE VENSO  
CARTOGRAPHY BY STEVE F. RUSSELL

## Hike Lewis and Clark's Idaho



Mary Aegerter  
Steve F. Russell





# Newspapers

SUNDAY  
February 27, 2000

## GREAT FALLS TRIBUNE

### High-tech equipment used to plot Lewis

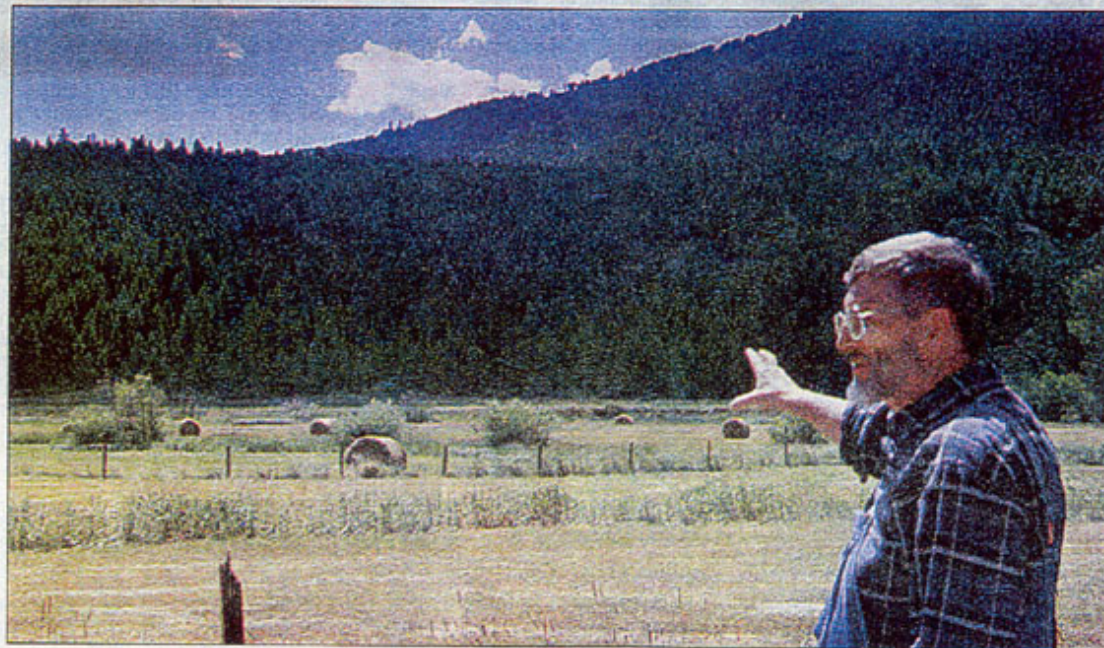
Satellites, journals  
aid professor as he  
traces historic trail

By DAN GALLAGHER  
Associated Press Writer

BOISE, Idaho — For 15 summers, Iowa State University engineering professor Steve Russell has scrambled along the same forest deadfall and rocky hillsides that Meriwether Lewis and William Clark's Corps of Discovery encountered in Idaho's mountains two centuries ago.

But instead of a flintlock rifle and trade beads, Russell carries state-of-the-art mapping equipment to pinpoint within several feet the actual ground the expedition crossed as it went west over the treacherous Bitterroot Mountains in 1805 to reach the Lewiston area and the Nez Perce Tribe who acted as Samaritans to the starved and weary explorers.

"The Lolo Trail spans a land of history, exploration, courage, and danger," Russell said. "It is regrettable that we will never be able to fully learn about its early history but



Iowa State University engineering professor Steve Russell looks at a pasture near Ross' Hole, Mont., in July, where Lewis and Clark met the Salish Tribe before crossing Montana's Bitterroot Mountains.

began. The route is largely untouched from the time it served as

changed so much. The mountain-scene doesn't change," Russell

the North and Middle Forks of the



# Workshops

“On the Trail with Lewis and Clark”  
Sawtooth Science Institute  
Idaho State University  
2002



Lewis' first Idaho Campsite



# Presentations

## *Welcome to a preview of the Lewis and Clark Symposium Presenters:*



Dr. Joseph Mussulman, featured speaker, noted teacher, humanist, and author, has gained a nationwide reputation as a serious student of the Lewis and Clark expedition. He has written several articles and created maps of the expedition's route for several books, including *Along the Trail with Lewis and Clark*. He is also the producer and principal writer for the encyclopedic web site, *Discovering Lewis & Clark* ([www.lewis-clark.org](http://www.lewis-clark.org)), which currently exceeds 1,300 pages. Dr. Mussulman will present the program, "Filling in the Zeros: Space, Pace, and Place on the Lewis & Clark Trail" on June 20, and "Men in High Spirits: Humor on the Lewis & Clark Trail" on June 21. Dr. Mussulman will also be performing music of the time of Lewis & Clark - In Greatest Harmony: "Medicine Songs" on the Lewis & Clark Trail at Brackenbury Square on Main St., Lewiston, Idaho.



Ron Craig, filmmaker-author, has made a one-hour documentary on "Who was 'York'?" York was the only African-American member of the 1803-06 Corp of Discovery's expedition to the Northwest. Ron will present his program on June 20 entitled, "Who was 'York'? A New Look at the Lewis and Clark Expedition."



Ken Karsmizki, noted archeologist, works with NASA combining airborne and satellite imagery with historic maps and Lewis & Clark journals to locate sites along the trail. On June 21, Ken will discuss the use of satellite remote sensing equipment in location and analysis of Lewis and Clark campsites.



Steve Russell, Associate Professor, Iowa State University, has researched the historic trails of the Lolo Trail corridor. His methods include the study of old maps, early aerial photos, pioneer survey notes, National Archive records and the journals of the expedition of Lewis and Clark. On June 21, Steve will present his program entitled, "Ordway's Salmon Fishing Excursion," and participate in a panel discussion of the study on the trail. He will also be involved in a book signing event at the Lewis-Clark Center for Arts and History on June 21. Steve will provide participants with historical overviews and interpretations on the bus tour to the Salmon Trout Camp

# Journals



## FEATURES

### Map of Ada County IDAHO

Showing  
Geographical Features  
Mathematical Items  
Political Subdivisions

- 3 The Main Line Comes to Boise  
by BARBARA PERRY BAUER
- 13 Report on the Feasibility of Irrigating  
and Reclaiming Certain Desert Lands  
in the Peyette Valley, Ada County,  
Idaho  
by P. J. KINNEY
- 25 The Riddle of Hungery Creek,  
September 18-20, 1805, and  
June 16, 18, 25, 1806  
by STEVE F. RUSSELL

## On the Trail of Lewis and Clark

### THE RIDDLE OF HUNGERY CREEK

SEPTEMBER 18-20, 1805,  
AND JUNE 16, 18, 25, 1806

by Steve F. Russell

*Fascination with the route and camping places of Lewis and Clark has remained strong for more than 100 years. With the approaching bicentennial of the Corps of Discovery, this interest is only intensifying. What is more, increasing numbers of people are interested in following the route themselves—not always a wise idea, as is certainly the case with the area described here.*

*This is the first in a series of articles that Steve Russell is preparing on his research of the route and camping sites as the Corps of Discovery crossed the mountains from the Missouri River basin to the Columbia River basin. Their passage through Hungery Creek and Fish Creek took them across what is now the Clearwater National Forest of north-central Idaho. They came through the area four times, once in 1805 and three times in 1806. The documentation of their various journals leaves us with a wealth of clues as to the route they followed, although William Clark's maps for this area are of limited value because of their topographic distortion.*

*The author, who was born in Lewiston, is an electrical engineer on the faculty of Iowa State University. His work on this project has grown as he has been more and more intrigued by the landscape crossed by the Corps—the campsites, the tread of prehistoric and historic trails, and the often very difficult terrain. His bibliography appears at the end of the article.*

## History of the Area The Nez Perce

Before they obtained the horse, the Nez Perce used foot trails to travel to important camping areas and family sites in the mountains, but these trails were probably very limited. After they began using horses for travel, things were different: frequent and relatively easy travel over a wide area became possible. Of the numerous Nez Perce horse trails, four were significant for this research.

The first was the southern branch of the Nez Perce trail followed by Lewis and Clark through Hungery, Fish, and Eldorado Creeks. The second was a trail that went from upper Hungery Creek over Austin Ridge and down to Lolo Forks and then on to Musselshell Meadows. The third was the northern branch of the Nez Perce trail that went over Snowy Summit. The fourth route was the old Pete King Trail that went from the Lochsa River northward along the ridges to the Lolo Trail at Pete Forks Junction. It is highly probable that this trail had its origins in an ancient Nez Perce trail which connected villages on the upper Clearwater River with the Lolo Trail. In fact, it was probably the main link that connected the trails at the junction of the Lochsa and Selway Rivers with the Lolo Trail. For this article, the key part of the Pete King Trail is the segment that

went north and south through Fish Creek Meadows. Most of this trail has been abandoned, and the lower elevations of the trail have been significantly impacted by logging activities. The upper trail was incorporated into the fire-suppression trail system by the Forest Service.

The northern branch, which went over Snowy Summit, is the easiest route of the Lolo Trail System to follow into the Weippe Prairie. It is this route that George B. Nicholson chose for the Lewiston and Virginia City wagon road survey in 1866 and the route over which the Bird-Truax Trail would be constructed.<sup>1</sup> Why Lewis and Clark followed the southern branch through such rugged country when a much easier route (Snowy Summit) was available is still puzzling. My opinion is that the Hungery Creek route was used in early spring and late fall (an early-late route) when Snowy Summit was buried in deep snow. Another possibility is that this route was the one pointed out to unknown strangers entering the land of the Nez Perce.<sup>2</sup>

Olin D. Wheeler's explorations, undertaken in observance of the Corps of Discovery's centennial, led him to choose the route from Hungery Creek to Austin Ridge and then down to Lolo Forks. This was no doubt a good Nez Perce trail in his time, but the route does not match the journal descriptions or courses and distances.<sup>3</sup>



# Emmy Wining Video

ECHOES OF A BITTER CROSSING  
**LEWIS &  
CLARK  
IN IDAHO**

## Video Available

*Lewis and Clark were the first white men to set foot in Idaho. No other state can make that claim. But their fabled journey through Idaho's Bitterroot Mountains nearly defeated the Expedition. Two hundred years later Idaho Public Television examines the most difficult part of the Lewis and Clark Trail with a modern day group of explorers.*



Copies of the hour long "Echoes of a Bitter Crossing: Lewis & Clark in Idaho" are available for purchase from Idaho Public Television by calling toll free 1-877-224-

7200 or, in Boise, 373-7220. The cost of the video is \$19.95 (\$20.95 with tax).

Also available is the half-hour OUTDOOR IDAHO version, "Lewis & Clark in Idaho". The cost of this video is \$16.95 (\$17.80 with tax).

There is a shipping fee of \$4.00 for the first tape and \$.50 for each additional tape.



ORDER

**BACK TO:** [Lewis & Clark In Idaho](#)

# Websites

Program Description

The Interactive Journey

Historian Gary Moulton

A GPS Expert on the Trail ←

A Campfire Discussion

Dugout Canoes on the Clearwater

What If... The Salmon River

The Journey of Sacagawea

A Native American Perspective

The Return Trip

## ECHOES OF A BITTER CROSSING LEWIS & CLARK IN IDAHO

Video Available

Watch the Show

Test Your Knowledge

Related Sites

**A Production of Idaho Public Television**



# Monographs

## Lewis and Clark Between the Rivers



*Smoking Place*

*Steve F. Russell*

HTR Publication No. 01

June 2001

## Microfilm Records of the Virginia City and Lewiston Wagon Road 1865-1870



The historical microfilm records including the  
Bird-Truax Trail in northern Idaho

Transcribed and edited by the Author

STEVE F. RUSSELL, PH.D., P.E.  
Associate Professor  
Iowa State University

# Websites

## Lewis and Clark Across the Mountains

### *An Engineer Tracks the Trail*

This site is the work of Steve Russell, a professor of Electrical Engineering at Iowa State University, who grew up in the Bitterroots, and who is the co-author of *Across the Snowy Ranges: The Lewis and Clark Expedition in Idaho and Western Montana...*



#### Introduction

This is a large-scale map of the trail.  
Click on any circle to learn about that region.



#### Lolo Trail Map

#### [Read about Historic Preservation](#)

#### [Touring the Route of Lewis and Clark](#)



Self-Discovery Experience

### Join the Corps of Discovery as they traverse the Lolo Trail in 1805

- Travel back in time 200 years.
- View the difficult mountain ranges as the explorers saw them.
- Map their actual path across the Bitter Root Mountains.
- See the actual trail traveled by the expedition
- Visit some of their campsites.
- Experience their desperation to get through the mountains.

Read the introduction by clicking on the scroll to the left or immediately begin the journey by clicking on the map.



[Go back to the beginning](#)

#### [Credits](#)



# Presentations

## *Fourth Annual Lewis and Clark Symposium*

*"Trails Through Time"*

*June 20-22, 2002*

*Lewis-Clark State College  
Lewiston, Idaho*

### ***Two Centuries, Two Peoples: A Confluence of Histories***

*The 2002 Symposium will focus on mapping, studying, and retracing a part of the trail of the Corps of Discovery through the land of the Nez Perce. Speakers will present more specific views of culture, preservation, protection and the interaction of the two peoples:*

***The Nez Perce Tribe and the  
Lewis and Clark Corps of Discovery***

***"...this hi Mountain is covered with Spruce & Pitch  
pine fir..." Capt. Clark, September 13, 1805  
(Lolo Summit)***

# *The End*

## Questions?



# The Lewis and Clark Trail

## Photo Gallery

**Steve F. Russell**  
**Iowa State University**  
**February 15, 2011**

# Tent Camp







Steve F. Russell 2004/08/16



# Sunrise





# Salmon River Canyon in Idaho





# Camping With the Nez Perce



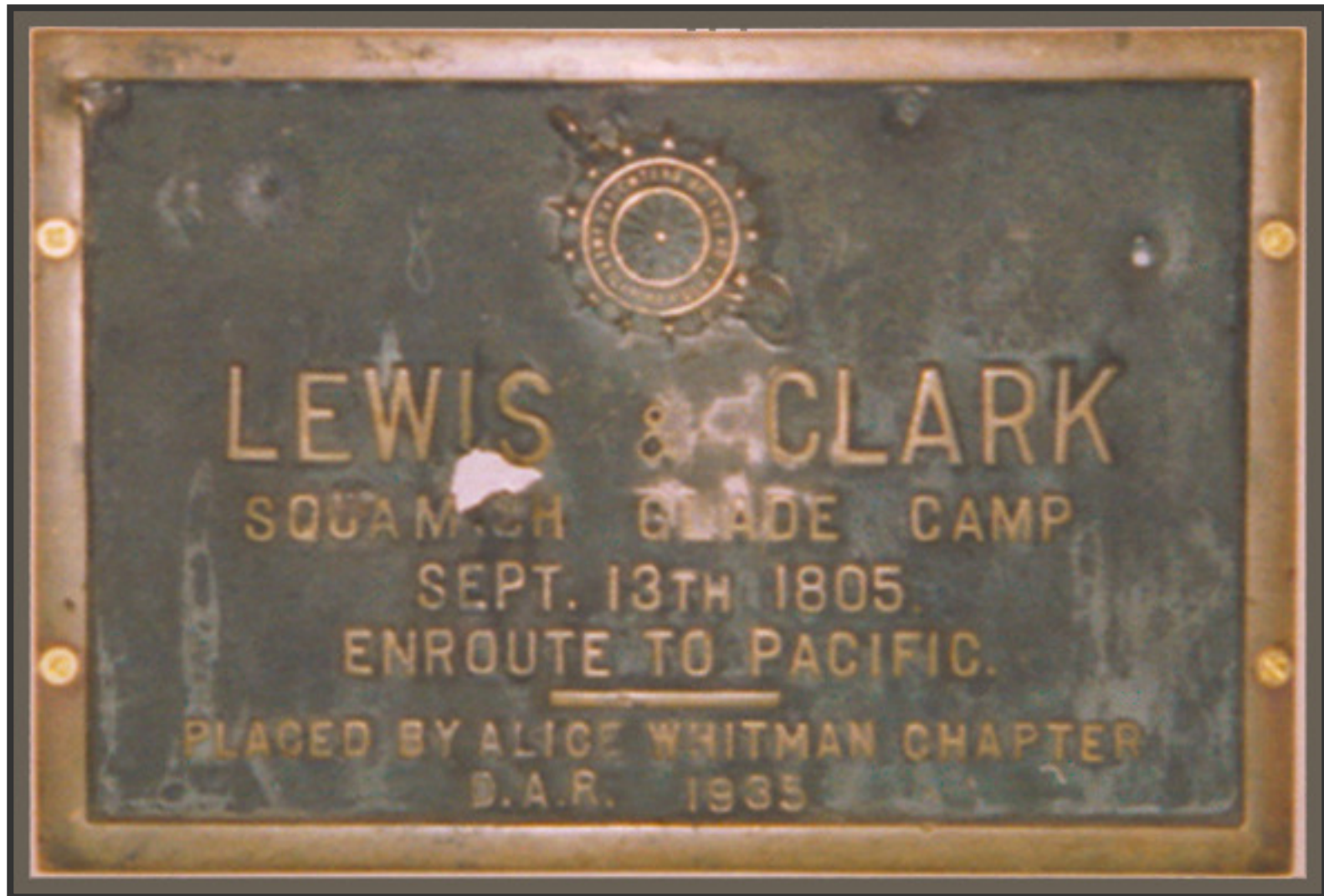




**Nez Perce lodges at Packer Meadows – Traditional Camping Grounds**

Steve F. Russell 2004/08/16

# Last surviving plaque put along the trail by Jack Harlan, 1935





# Fire on the Landscape







**Hungary Creek  
Looking Westward**





**Lower Hungery Creek**



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Old 1976 Ford Pickup  
at Horseshoe Lake Lookout





## **The Northern Nez Perces Trail 2003**

Steve F. Russell 2004/08/16





## Ancient Nez Perce Trail

**1988**





**Lewis and Clark Trail  
at  
“Tipped Rock”**



## **Lewis and Clark Trail at Spring Mountain**





Steve F. Russell  
Recording data on the Lewis & Clark Trail  
East of the Sinque Hole





# **Indian Paintbrush**

*Castilleja septentrionalis*

**Figwort Family (Scrophulariaceae)**





**Beargrass**  
*Xerophyllum tenax* (Pursh) Nutt.





The rugged Bitterroot Mountains

Steve F. Russell 2004/08/16





## 1<sup>st</sup> Nez Perce Trail Ride – 1990

Steve F. Russell 2004/08/16



# Salmon River





# Lemhi Pass











**On the Idaho-Montana Border at Lolo Pass**









**Bald Mountain**  
**A Well-Known Lewis & Clark Camping Place**

Steve F. Russell 2004/08/16





**“Junior”**