

**Manhattan Project National Historical Park
Hanford, Washington**

National Park Service
U.S. Department of the Interior



**MANHATTAN PROJECT NATIONAL HISTORICAL PARK
HANFORD UNIT
PRE-MANHATTAN PROJECT HISTORY**

JUNIOR RANGER BOOK

This book belongs to:



The Manhattan Project National Historical Park is a partnership between the National Park Service and the Department of Energy that tells the stories of top-secret sites in Los Alamos, NM; Hanford, WA; and Oak Ridge, TN that were created as part of the Manhattan Project during World War II. Aimed at developing an atomic weapon before Nazi Germany, the Manhattan Project successfully produced two of the most powerful weapons the world had ever seen, helping bring an end to the war and ushering in the Atomic Age.

Junior Ranger Program

National Parks are very special places that protect the most important stories in our nation's history and allow all visitors to experience our heritage. This handbook will help you discover why the Manhattan Project National Historical Park is one of these special places. Allow about 3 hours to earn a Junior Ranger badge.

Activities in this book can be completed by taking a Pre-Manhattan Project Historic Tour. Stop by the Visitor Contact Station for more information. The office is open Monday through Saturday from 8 a.m. to 4 p.m. Pacific Time.

Some other historic spots in our area:

- B Reactor National Historic Landmark
- "Alphabet" homes built for Manhattan Project workers
- The USS Triton Sail Park
- Sacajawea State Park
- Whitman Mission National Historic Site



Alphabet Houses in Richland - an "A duplex"

Questions?

Call or visit the Visitor Contact Station and Tour Headquarters for the Manhattan Project National Historical Park's Hanford Unit at:

2000 Logston Boulevard
Richland, Washington 99354
(509) 376-1647

Visit us online!



www.nps.gov/mapr
tours.hanford.gov/historicTours/



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www.facebook.com/ManhattanProjectNPS



What is a Junior Ranger?

Someone like you who completes Junior Ranger activities and promises to care for our national parks. Have fun exploring! You can earn your badge on your tour today. When you are done, take this handbook to the Visitor Contact Station and show it to one of the staff.

To earn a badge, complete at least 8 handbook activity pages.



1st Activity Page



Designed in 1951, the arrowhead is the National Park Service symbol. Look at it carefully. Each part represents something that park rangers protect. Fill in these words to decode the Arrowhead.

bison sequoia tree lake arrowhead mountain

The _____ represents plants.

The _____ represents animals.

The _____ represents scenic landscapes.

The _____ represents water resources and recreation.

The _____ represents history and culture.



2nd Activity Page

Did You Know?

In 1872, Yellowstone National Park became our country's first national park. In the early years, most national parks were in the western states. This is why the badge has western symbols. Today, the National Park System includes seashores, battlefields, monuments (like the Statue of Liberty), huge wetlands, scenic rivers, islands, and parks focused on history (like Manhattan Project National Historical Park). Record how many arrowheads you see during your visit. Can you spot them on signs, cars, brochures, and uniforms?

List any other national parks you have visited.

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____



Manhattan Project National Historical Park Kids in Action Challenge:

There are many fun ways to get moving in this national park. Our challenge to you is to do one of the following activities for each year of your age. For example, if you are 8 years old, we'd like you to **complete 8 things on our list**. Check the square when you finish each one.

- I found the faces in the chimney on the structure at Bruggemann's farmstead.
 - I saw the remains of a round silo at the Bruggemann's farmstead.
 - I drove along the old railroad bed that Sage Brush Annie travelled down.
 - I saw the HIPC Pump House and the beginnings of the Hanford Ditch.
 - I discovered the strange mounds of earth called mooli-moolis.
 - I saw the White Bluffs Ferry landing and walked down to the Columbia River.
 - I looked into the White Bluff's Bank and saw the old safe.
 - I visited two different locations where the town of White Bluffs was located.
 - I saw Gable Mountain and Gable Butte.
 - I saw what is left of the old Hanford High School.
 - I saw my first _____.
 - I drove past the location where Lake Hanford was located.
 - I stood where the Hanford Construction Camp was located.
 - I saw a picture of one of the mess halls at the Hanford Construction Camp.
 - I saw an old piano that belonged to a family that lived in White Bluffs.
 - I saw the following wildlife: _____
-
- I saw rusted pieces of an old car at the HIPC Pump House.



4th Activity Page

Identify the structures / locations below that were present on the Hanford site prior to the arrival of the government in 1943.



1. _____



2. _____



3. _____



4. _____



Native American Challenge

There were several Native American tribes who utilized the lands and waters that became part of the Hanford site in 1943. How many can you name?



Chemna village, located where the Yakima River flows into the Columbia River, was where William Clark, of the Lewis and Clark expedition, documented an event for the first time in 1805. What was the event? _____

Match the Native American term with today's term:

- | | |
|--------------------|---|
| ____ Nookshai | a. Rattlesnake Mountain |
| ____ Washani faith | b. Columbia River |
| ____ Chiawana | c. Horn Rapids |
| ____ Mooli Mooli | d. Gable Mountain |
| ____ Laliik | e. Yakima River |
| ____ Tapteal | f. Little stacked hills or land bubbling up |
| ____ Wanawish | g. Dreamer religion |



Early European-American Settlers

The _____ Act was passed in 1862 in order to encourage people to move west and farm the land and was signed by President _____.

List at least three challenges that the early settlers faced in eastern Washington.

If you were child growing up on a farm in the Priest Rapids Valley, what might some of your daily chores have been? _____



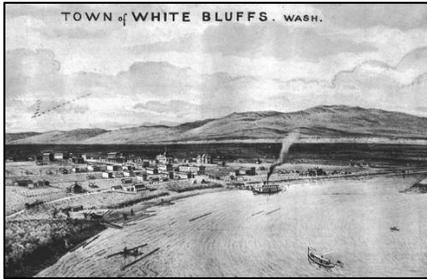
What important service did Sage Brush Annie provide to the orchardists? _____

How did the Newlands Reclamation Act of 1902 improve agriculture in the Columbia Basin?



Pre-Manhattan Project Timeline

Fill in either the **year** an event occurred or the **event** itself if the year is provided.

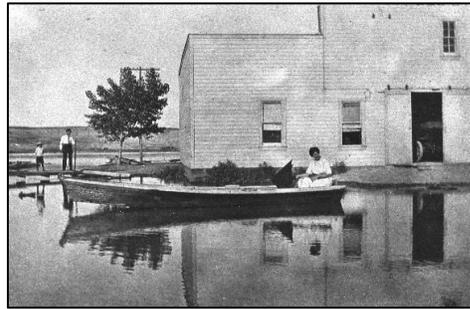


Year: _____

The year the town of White Bluffs was first established.

1894

Event: _____

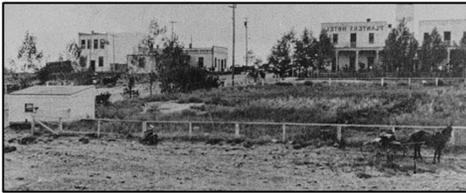


Year: _____

The year the second location of White Bluffs was established.



7th Activity Page (continued)

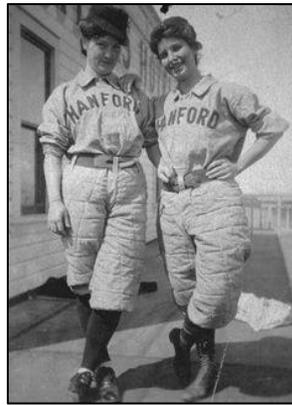


Year: _____

The year the town of Hanford was established.

Event: _____

1916



Year: _____

The year the Hanford High School burned down.



1943

Event: _____



8th Activity Page

Priest Rapids Valley Who's Who: Match the person with his or her description.

___ Sam Allard

a. Fruit packer who received a letter from a hotel chef in Alexandria, Egypt regarding a crate of pears purchased from Priest Rapids Valley.

___ Manly Bostwick Haynes

b. Very successful German immigrant who raised peaches and apricots in Priest Rapids Valley.

___ Mary Cox

c. A Seattle area judge for whom a town in the mid-Columbian basin was named for.

___ George Borden

d. Businessman who was the brainchild behind the effort to irrigate the Priest Rapids Valley; he also established the town of Hanford.

___ Paul Bruggemann

e. He operated the pump house owned by the Hanford Irrigation and Power Company.

___ Cornelius Holgate Hanford

f. He operated the White Bluffs ferry and drowned in the Columbia River in 1906.



Pre-Manhattan Project NHP Hidden Word Search

Can you find the fruits, crops and other agricultural products grown by the farmers that were displaced by the arrival of the government to the mid-Columbia Basin in 1943?

B D O S T O C I R P A E A S C
T O R O M G I N O S U L P E V
P N B M U I R A P U B S I I U
O R R U W I S A R D M E E R E
T S O O E U R R P N A I X R O
A S E H C A E P Y E S R H E N
T E V I G Z A H E O S R E B I
O O E U K L T N I M S E S W O
E A S J F O E P X E O H T A N
S I S A M O E D M R C C R R S
E B L I S A S E O T A M O T I
N F T E R Q R Y E G R A S S P
A F G S E L P P A X I F R O I

- | | | | |
|-----------|--------------|----------|---------|
| Mint | Strawberries | Ryegrass | Corn |
| Grapes | Cherries | Timothy | Apples |
| Asparagus | Peaches | Potatoes | Alfalfa |
| Apricots | Tomatoes | Pears | Onions |



10th Activity Page

Word Jumble

The answers to the questions below are jumbled. Can you straighten the words out?

On what river was Wanawish ("rock dam fishing place") located on?

KIMYAA _ _ _ _ _
8

What was discovered on Rattlesnake Mountain while drilling for water?

TURALAN AGS _ _ _ _ _ _ _ _
7 2

What's the name of the family that owned the stone building with the faces on each side of the chimney?

GEMGNUANRBN _ _ _ _ _ _ _ _
6

What were the names of the three main towns in this area prior to 1943?

DLANHRCI, DORHFNA, TIWEH LUFSFB
_ _ _ _ _ , _ _ _ _ _ , _ _ _ _ _
1 10

What was the nickname of the railroad that ran past White Bluffs and to Hanford?

GSAE UBRHS NAIEN _ _ _ _ _ _ _ _
5 3

What structure carried water from the Allard pump house to Hanford?

FNOHDRA HTDCI _ _ _ _ _ _ _ _
9 4

Can you find the secret word? Take the letter with a number under it above and place it in the space with the same number below:

_ _ _ _ _
1 2 3 4 5 6 7 8 9 10

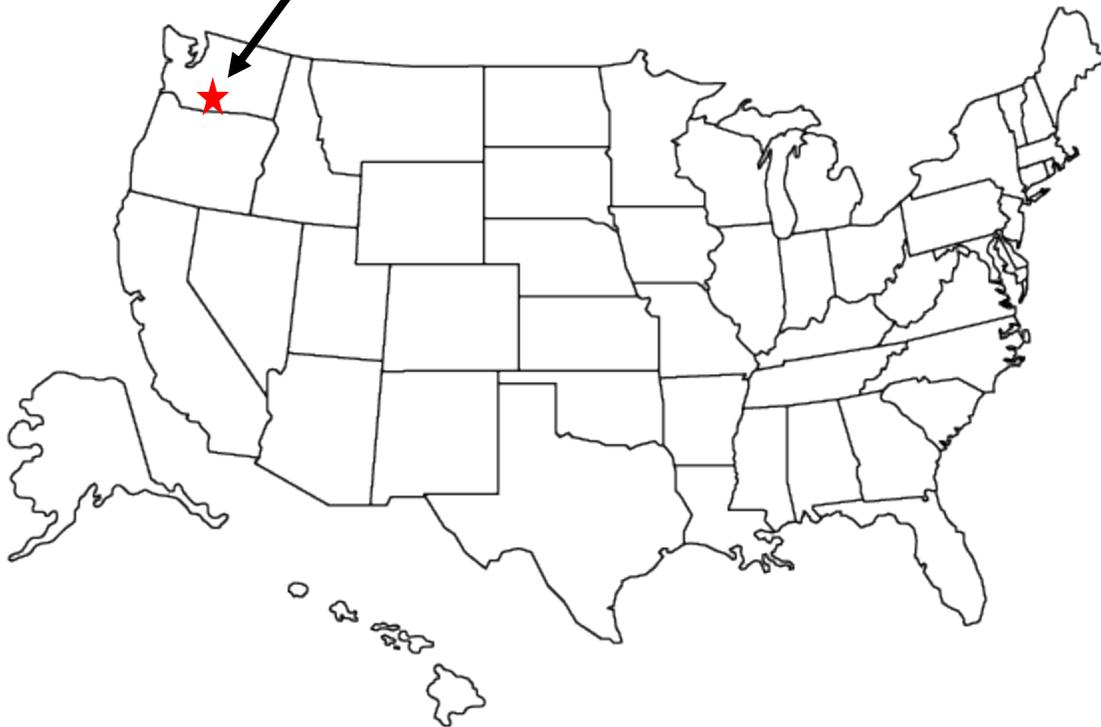


11th Activity Page

Map Trivia



Manhattan Project National Historical Park
Hanford, WA



1. Circle your own state.
2. Trace your trip from your home to the Manhattan Project National Historical Park at Hanford.
3. Put a star where Los Alamos, NM and Oak Ridge, TN are located.
4. Name the National Park that is closest to your home:



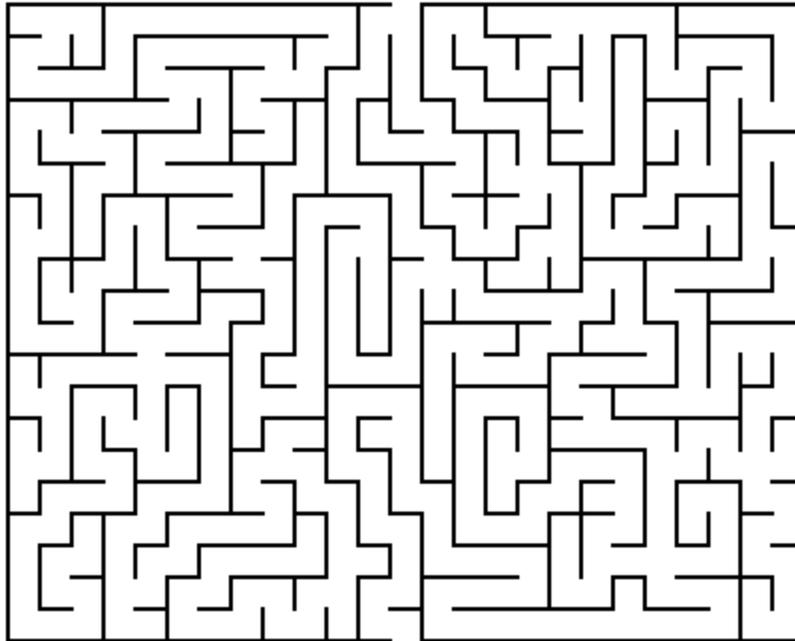
12th Activity Page

Amazing! See if you can find your way from Bruggemann's farm to Hanford HS.



Bruggemann's Farm

START



END

Hanford High School





13th Activity Page

I Saw That! Draw a line through each item as you see it. How many: _____



Sagebrush



Elk



Hanford High School



B Reactor



White bluffs along Columbia River



Goose Egg Hill



Rattlesnake Mountain



Osprey Nest



Allard Pump House



Pelicans



Wanawish Dam



Bruggemann's Farm

Junior Ranger Pledge

As a Junior Ranger of Manhattan Project National Historical Park, I promise to keep learning more about the history and legacy of the Manhattan Project and help preserve the park for future generations.

This certifies that _____, age _____, has successfully completed the requirement of a Junior Ranger on this _____ day of _____, 20 _____.

Reviewed by Park Staff Member _____
Name of Park Staff Member

If you can't return to the Visitor Contact Station, mail your handbook to:

**Manhattan Project National Historical Park – Hanford Unit
2000 Logston Boulevard
Richland, Washington 99354**

Tell us where to mail your badge (if necessary):

Name _____
Address _____
City _____
State _____ Zip _____

Park Stamps and Memories:



This certificate is proudly presented to

please print name

for completing the

Manhattan Project National Historical Park
Pre-Manhattan Project History
Junior Ranger Activity Booklet

Dated this _____ day of _____

Staff Member Signature