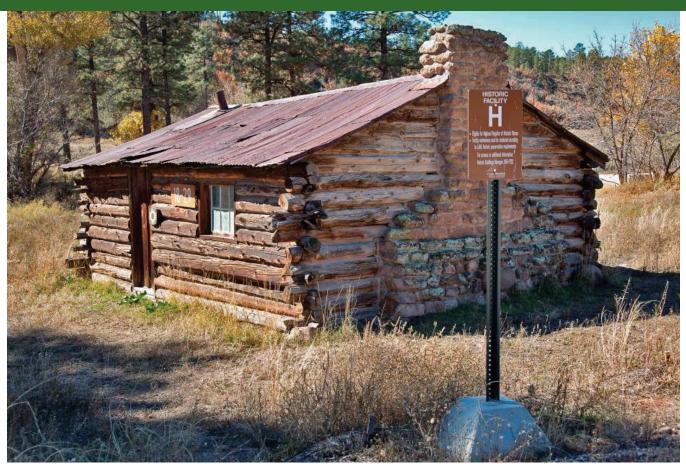
## **Manhattan Project National Historical Park**



Pond Cabin, built in 1914, is listed on the New Mexico State Register of Historic Places and is the only surviving log structure at the Laboratory dating to the Homestead period. (Photo: Los Alamos)

## Plans for America's newest national park include admitting the public onto Laboratory property—without compromising national security or the Lab's mission.

In 1914, Detroit businessman Ashley Pond constructed a log cabin on the Pajarito Plateau in north-central New Mexico. The one-room structure served as the office for the Pajarito Club, a guest ranch for well-heeled city folk looking for a little Wild West adventure. Although the Pajarito Club was short-lived (it disbanded in 1916), Pond remained in the area and went on to found the Los Alamos Ranch School in 1917. The elite prep school offered classical education and rigorous outdoor activity for boys ages 12–18. But once more, Pond's business venture was fleeting. In 1942, the U.S. government purchased the school and launched Project Y (now Los Alamos National Laboratory) of the Manhattan Project in its stead. You know the rest.

But what about the cabin? Pond Cabin, as it's now called, is not only still standing, but the approximately 400-square-foot structure has amassed quite a bit of history under its corrugated metal roof. During the Manhattan Project, Italian physicist and Nobel laureate Emilio Segrè used the cabin for

plutonium chemistry research that resulted in the surprising discovery that the Thin Man plutonium gun-type weapon design would never work. As a result, the wartime Laboratory was extensively reorganized to develop an alternative: the incredibly complex Fat Man plutonium implosion-type weapon.

Today, Pond Cabin is one of nine Laboratory properties included in Manhattan Project National Historical Park (MPNHP), which was signed into law on November 10, 2015, and tells the story of America's nuclear weapons science, technology, and industry during World War II. The Los Alamos site is one of three locations for the park—the National Park Service's first multisite, multistate endeavor, which also includes key Manhattan Project facilities in Oak Ridge, Tennessee, and Hanford, Washington.

In Oak Ridge, for example, park-goers can tour the X-10 Graphite Reactor that produced small quantities of plutonium; in Hanford, guests are bussed to the B Reactor,

which produced plutonium for the Trinity Test and the Fat Man bomb. In Los Alamos, however, the situation is a bit different because *none* of the designated park buildings are currently accessible to the public (they are located on sites still being used for nuclear weapons research)—and likely won't be for several years.

"How do we provide visitor access while also maintaining the kind of security and controls that are so important for active sites, as they are right now, for scientific discovery and research?" Department of the Interior Secretary Sally Jewell asked during MPNHP's memorandum of agreement (MOA) signing with the Department of Energy. "How do we maintain security and safety concerns for the public?"

The answer is: Very carefully.

Technical Area-18 (aka the Pajarito Site, home to Pond Cabin and two other MPNHP structures: the Slotin Building and Battleship Bunker) will likely be the first area to open up. "Technical Area-18 is in the process of being closed and is the best bet for nearer-term access because it's no longer a high-security area," explains Ellen McGehee, Laboratory historian and MPNHP project manager. But that doesn't mean history buffs will just be able to enter the Lab willy-nilly; park visitors will likely be bussed to the site from the nearby White Rock Visitors Center and chaperoned during their tour.

"We want to meet requirements for public access without constraining the work required to meet the Laboratory's ongoing national security mission," McGehee says. "The vital

mission of the Lab will not be negatively impacted by the public entering the park." McGehee notes that while access issues are being addressed, the Lab has other strategies for engaging and educating the public.

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Those strategies include beefing up the Los Alamos Historical Society's walking tour of downtown Los Alamos, which includes several Ranch School-turned-Manhattan Project structures, the Bradbury Science Museum, and Ashley Pond Park.

In spring 2016, visitors will be able to stand in Ashley Pond Park and—via an app developed by the Laboratory—see how the landscape looked in the 1940s when it was the key technical area for Project Y.

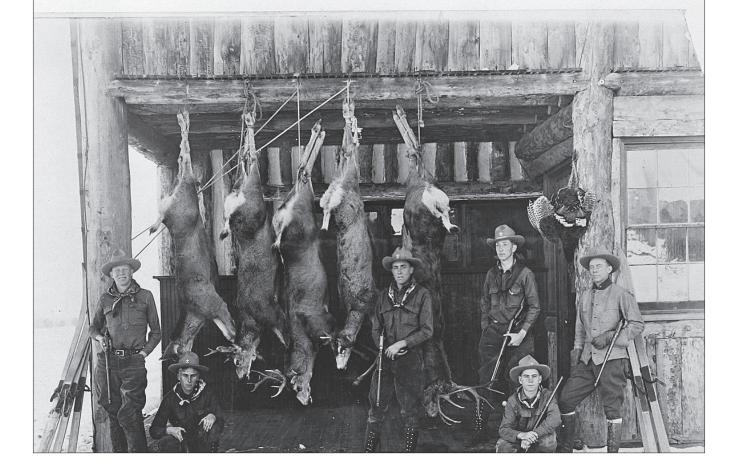
A second feature of the app will allow users "to view Los Alamos from anywhere in the world, almost like a computer game," McGehee explains. "You get off the train at Lamy, New Mexico; you meet Los Alamos's 'gatekeeper' Dorothy McKibbin at 109 East Palace Avenue in Santa Fe; you go up 'the Hill' to the Laboratory; as you go through town, sites in the wartime technical areas are unlocked."

Users of the app will thus see many of the Laboratory's original buildings that are currently in the park but not yet ready for public admission. The idea is that, even without full access, people will come away with an understanding of the history and legacy of this part of the Manhattan Project.





Technical Area-18 (aka the Pajarito Site—home to Pond Cabin, the Slotin Building, and Battleship Bunker) will likely be the first area accessible to the public. During the Manhattan Project, Italian physicist and Nobel Laureate Emilio Segrè (far left, with his group) used Pond Cabin for plutonium chemistry research.



At the MOA signing, Secretary of Energy Ernest Moniz touched on this legacy, recognizing the Manhattan Project as the foundation for federally sponsored scientific research in America. "Our 17 national laboratories that have grown out of the roots of the Manhattan Project are part of this country's science and technology powerhouse," he said. "They drive innovation, they address critical problems, they also provide the backbone for basic science research in this country, serving 30,000 scientists per year with cutting-edge facilities."

Secretary Moniz then mentioned the 2009 Prague Agenda and President Obama's vision for nuclear disarmament. "But doing that requires ongoing first-class science, first-class engineering, as we shrink the stockpile to make sure that what we have supplies a deterrent but also remains safe and secure," he said. "So it's a big job ahead. I think this national park will provide the platform for our citizenry to understand the roots of this and what it means in terms of future responsibilities."

~Whitney J. Spivey

Above: In its 25 years, the Los Alamos Ranch School educated more than 600 boys. In addition to traditional academic subjects, outdoor education was part of the curriculum at the school, and—as seen in this 1922 photo—dayslong hunting expeditions were scheduled during deer season.

On December 7, 1942, a letter from Secretary of War Henry Stimson informed students and faculty that the U.S. government was taking over the school "in the interests of the United States in the prosecution of the War..." The last graduates received their degrees the following January "while bulldozers and mechanical diggers were already tearing up the mesa to make room for the Manhattan Project," according to the Los Alamos Historical Society.

Opposite, top row: This spring, visitors will be able to stand in Ashley Pond Park (right) and—via an app developed by the Laboratory—see how the landscape looked in the 1940s when it was the key technical area for the Laboratory during the Manhattan Project (left).

Opposite, middle row: Gun Site was used during the Manhattan Project to conduct tests in support of the gun-type weapon designs known as Thin Man and Little Boy. Components of Little Boy were assembled at Gun Site before being shipped across the Pacific on the USS Indianapolis for use against Hiroshima.

Opposite, bottom row: The Slotin Building at Technical Area-18 is a small, wood-frame building that was built according to World War II temporary construction standards. On May 21, 1946, an accident at this location (recreated for analysis in the image at left) led to the death of scientist Louis Slotin, which is why the structure is called the Slotin Building today.

For more on Manhattan Project National Historical Park: nps.gov/mapr

(Photos: Los Alamos)

