



WRIGHT
PALEOHYDROLOGICAL
INSTITUTE

Paleohydrology is "the study of water use and handling by ancient people."

Wright Paleohydrological Institute (WPI) is a non-profit organization established in 1996 for the study of ancient water use. WPI is a public foundation with a proud record of public interest activities related to ancient water management.

Inside this issue:

Productive Visit by Professor Richard Miksad of Virginia	2
Phoebe Hearst Museum	2
Paleohydrology Lectures	2
2019 Pompeii Research	3
Saqsaywaman Field Work in 2019	3
Institute of Andean Studies Poster Presentation	3
Donation Form	4

Wright Paleohydrological Institute

To further the knowledge of past civilizations through the study of ancient water management and practices.

Winter 2019/2020

New Classroom in Lima

In 2019, Ken and Ruth Wright were delighted to learn that a classroom at the Universidad Nacional de Ingeniería (UNI) in Lima, Peru, was named in their honor. UNI's civil engineering faculty voted to dedicate the classroom to the Wrights to celebrate their research on Peru's ancient engineers, the Inca.

A dedication ceremony took place on July 1. Ken and Ruth's colleague Professor Emeritus Richard Miksad of the University of Virginia stood in for the Wrights at the event,

providing a short lecture on the engineering wonders of Machu Picchu and several other Inca sites that were studied by the Wright team over a 25-year period.

The classroom will showcase the publications

of the Wrights' on ancient native technology of the Inca empire.

The Wrights were touched by this kind gesture of appreciation by their friends and cohorts in Lima.



The new classroom at UNI features a plaque (left) and three walls of large images of the Inca sites Ken and Ruth studied and their books on paleohydrology (right).



2019 Calendar Wins Awards

WWE's 2019 Machu Picchu & Pompeii calendar won top national awards! The calendar was given a gold medal from the National Calendar Marketing Association for Best Subject and another

gold medal under the promotional division for Best Non-Profit. Then for good measure, the association awarded us a silver medal for Best Scenic for a total of three awards.

Competition for these honors is stiff. For instance, our calendar was up against Goodyear, U.S. Metro Bank, and Sports Illustrated Swimsuit calendars.

Thank You for Your Support in 2019

WPI continues to study how ancient people dealt with water and how modern water can affect ancient structures. Your

generosity helps make this happen.

You can support our public education efforts in

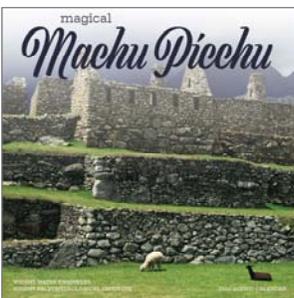
2020 with donations from \$5 to \$200. Ruth and Ken Wright match contributions at two to one.



Top: The October 2019 meeting of the WPI board at the Chautauqua Dining Hall in Boulder. Second: Dick Miksad presented a lecture on Saqsaywaman to a group of drainage and flood control professionals in Denver.



Traditional Inca textile weaving, as depicted in the Spanish text, *El primer nueva corónica y buen gobierno* by Felipe Guaman Poma de Ayala (ca. 1600)



Magical Machu Picchu

Productive Visit by Professor Richard Miksad of Virginia

In October, we had a fruitful visit from Dr. Richard Miksad of Virginia, and his wife, Robin. Dr. Miksad is engineering dean emeritus of the University of Virginia (UVa) and a WPI Public Member. While in town, he gave a presentation at the Mile

High Flood District on his study of water and Inca drainage practices at the Inca site of Saqsaywaman.

Dr. Miksad has been leading engineering students and graduate students from UVa in conducting research at Saqsaywaman, near Cusco,

for nine years now. The studies have included ceremonial water features and drainage.

Dr. and Mrs. Miksad also participated in a WPI board meeting while they were in town.

Phoebe Hearst Museum

As a long-time supporter of the Phoebe Hearst Museum at the University of California–Berkeley, WPI is happy to see that the museum is now focusing on ancient Andean textiles. In a way, textiles are the language of the ancient Inca people because, in the absence of a written language, they tell us of their culture and aspirations. Textiles

represent a form of communication.

Our connection with the Museum at Berkeley has been to provide funding for the John H. Rowe Memorial Fund at the Phoebe Hearst Museum of Anthropology. John Rowe was a leading and productive Andean Scientist who shed light on the ancient Inca empire.

Ken and Ruth Wright's support has focused on curating one of the most important Andean collections in the United States, with an emphasis on preservation. Collections Manager Leslie Freund has been leading a staff of 33 people in this preservation effort, which will make the collection more available to the public.

Paleohydrology Lectures

WPI provides many public lectures each year. For example, in 2019, Wayne Lorenz presented on Pompeii water studies at the Society for American Archaeology annual meeting in Albuquerque, New Mexico, with University of Missouri

Associate Professor of anthropology Kate Trusler.

As another example, the Foothills Rotary Club of Fort Collins invited Ken Wright to give a lecture on ancient water management at Mesa Verde in April.

Dr. Richard Miksad gave three paleohydrology presentations while he was in Peru last summer. He spoke on the hydraulics of Saqsaywaman, a Water Temple at Saqsaywaman, and dedication of the Kenneth and Ruth Wright Classroom.

2020 Machu Picchu Calendar

Our 2020 scenic calendar, *Magical Machu Picchu*, is now available! This beautiful calendar features the photos of Ruth and Ken Wright and Kurt Loptien. It was designed by Todd Clary.

It is the 24th calendar that we have produced after WPI first obtained a permit to study Machu Picchu in 1994. Machu Picchu is the initial place where WPI studied

paleohydrology and it is our first love.

Calendars are available for purchase at <http://wrightpaleo.com/wordpress/scenic-calendar/>.

2019 Pompeii Research

Wayne Lorenz and Jamie Akens of WPI performed field work in Pompeii in June of 2019. The WPI team was privileged to meet with the General Director of the Pompeii Archaeological Park, Massimo Osanna, to discuss new water features being excavated in Regio V (Region 5).

Wayne is conducting research on the water fountains of Pompeii in

collaboration with Dr. Kate Trusler of the University of Missouri. Wayne and Kate and their teams were pleased to perform their research while the Region 5 portion of Pompeii was being excavated for the first time. These excavations have unearthed some special discoveries like a petrified purebred horse wearing a bronze-plated military saddle and some evidence that the date of

the Vesuvius eruption may have been different than originally thought.

Wayne and Jamie also perform a reconnaissance survey of aqueduct remnants in the Cuma, Puzzoili, Baia, Bacoli, and Miseno areas. Access to these areas was made possible by WPI researcher Giuseppe Illiano.



Giuseppe Illiano, Michael Anderson (University of San Francisco), Wayne Lorenz, and Jamie Akens stand in front of the largest mosaic fountain in Pompeii.

Saqsaywaman Research in 2019

Professor emeritus Richard Miksad of the University of Virginia was in Cusco this summer conducting further research at Saqsaywaman. Dr. Miksad's students and graduate students were joined by students from Universidad Nacional de San Antonio Abad del Cusco, Universidad Andina del Cusco, and Universidad Nacional de Ingeniería.

Saqsaywaman is the largest, most impressive religious complex of the Inca empire. There's more to it than the great walls—water is the connecting theme.

This summer's research was performed by teams focused on seismic refraction studies, total station measurements, and ground penetrating radar. The efforts furthered 3D modeling of the Inca

terraces that will encourage Peru's Ministry of Culture to preserve Saqsaywaman by returning the site's drainage to the conditions more similar to those originally designed by the Inca engineers.

Professor Miksad is working on a book about Saqsaywaman that compiles the work of many experts and promises to be an encyclopedia of the site.



Dr. Richard Miksad stands before one of the famous monolithic stones of Saqsaywaman.

Institute of Andean Studies Poster Presentation

Ken and Ruth Wright will present a poster on Native Technology at the January 2020 meeting of the Institute of Andean Studies at the University of California—Berkeley.

The poster will illustrate that native technology, as represented by Inca civil engineering achievements, is well documented by the field evidence left behind at archaeological sites.

Prehistoric remnants that that illustrate this theme include the Inca road system that was described by the National Museum of the American Indian in Washington, D.C. It tells a story of technical achievements across what are now six South American countries and 24,000 lineal miles of trail.

Machu Picchu is another example of abundant

Inca engineering remnants. Its fountains, canals, drainage, retaining walls, and building structures provide field evidence of Inca skills. The poster will also highlight native technology achievements at Tipon, Moray, and Ollantaytambo in Peru.

Please call Sally Kribs at (303) 480-1700 if you would like a copy of the poster.



The Inca Road to Machu Picchu is a good example of native technology.

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This is a record of my contribution to the Wright Paleohydrological Institute to further publicly oriented scientific research on water management and use of water by ancient people along with associated public educational efforts. All contributions are fully tax deductible.

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AGAIN, WPI THANKS YOU FOR YOUR SUPPORT

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