

# What ever happend to Arlington (wo)man

**W**ITH ALL THE FUSS over the 400-year anniversary of Jamestown, the first European colony in the future United States, it's easy to forget that the West was settled far earlier. The oldest known remains in the U.S. — Arlington Man, who is currently dated at 13,000-years-old — are from Santa Rosa Island, between westernmost San Miguel and Santa Cruz, the largest Channel Island. Last fall, Arlington Man was re-designated a male after having spent almost two decades as a woman.



**KAREN TELLEEN-LAWTON**

The story begins in 1959, when Dr. Phil C. Orr, the then-curator of the Santa Barbara Museum of Natural History, excavated human bones in the Arlington Springs area of Santa Rosa. The records and existing bones do not quite match, but he apparently found two femora and probably a patella and a humerus. Orr extracted a chunk of soil including the bones, but at least one piece, the head of a nearly complete femur, fell from the soil matrix, later to become both the cause of and answer to many mysteries.

At the time, the bones were dated at 10,000 years old, the oldest remains in North America based on charcoal found at the same strata. This date is congruent with the retreat of the last ice age around 10-11,000 years ago, so it fell within the accepted land-bridge hypothesis that humans walked down the American Pacific coast as the ice retreated. Although no skull or pelvis surfaced, Orr concluded there was a 70 percent chance the remains were male, based on the femora measurements. He became Arlington Man.

Over the years, the unattached pieces of

Arlington Man traveled a bit among archeologists; their itinerary and even their identification became murky. The location of the head of the femur was unknown. Sometime before 1963 Orr sent a piece to Kenneth Oakley, an English physical anthropologist and paleontologist helped exposed "Piltdown Man" as a fraud. In 1989, a radiocarbon dating expert at UCLA named Rainer Berger published a paper stating Arlington Man's age as "in excess of 10,000-years-old."

Meanwhile, Orr's successor, Dr. John R. Johnson, faced colleague's doubts about the age of the bones. Their unearthing near a spring raised the possibility that water had moved the bones from one sedimentary strata to another, making their dating specious. But newer techniques allowed the bones themselves to be tested, so Johnson and Chumash research assistant Gilbert Unzueta excavated a portion of femur from the block of earth Orr had preserved, sending samples to several specialists in bone chemistry analysis and radiocarbon dating. They found the bones to be even older: 13,000 years old. Moreover, based on the thickness of the bones in the Museum's possession, Johnson found a 70 percent probability that "he" was a "she."

The new date had two important ramifications. One was that Arlington "Woman" was still the oldest North American. More importantly, the earlier date and the bones' presence on an island implied that humans migrated by boat, before the ice retreated.

The 13,000 age has stuck for close to twenty years, but Arlington Woman's proba-

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ble sex has changed again. Last summer a UCSB anthropologist, Dr. Patricia Lambert, visited the Museum on an NSF-funded project to undertake radiocarbon dating. Comparing the nearly complete femur to a known-sex femur from the UCLA collection, she commented to Johnson that "she" might be a "he." Curious, Johnson dug once more, this time in Orr's original notes, and found his predecessor's measurements of the missing head of the femur. He reported this new measurement to Dr. Phillip Walker, who had developed a database of Channel Islands skeletal remains of known gender. Based on the diameter of the head of the femur, there

was 70 percent probability that the bone was again a male. And so it goes.

Jamestown, Virginia's anniversary illuminates recent scholarship that changes textbooks and confronts factors that were not previously considered. A May 2007 National Geographic article points to the colonists' intentional and inadvertent importation of bees, worms, and tobacco that changed the landscape as much as the colonists themselves. In the same way, the advancements in chemical and radiocarbon dating have brought Arlington Person into a collision course with woolly mammoths, which went extinct at the end of the last ice age.

If the earliest arrivals hunted the mammoth to extinction, as is now posulated, then human's inadvertent

changing of the environment is a long-standing tradition. Of course, the world's population 13,000 years ago was only a few million, whereas now we are over six and a half billion. If a few million people can wipe out megaspecies, it's not difficult to imagine what six or seven billion can do. If only we can figure out how to step lightly before the earth is left to marauding earthworms.

*Karen Telleen-Lawton's Tuesday column is a mélange of local people, nature, events, and observations transporting the reader around the world and back to Santa Barbara. She is a local writer and the author of Canyon Voices — the Nature of Rattlesnake Canyon.*