

**NEVADA HISTORICAL
SOCIETY QUARTERLY**



**Mark Harrington:
Father of Nevada Archeology**

Ruth Simpson



**Development of Emigrant Routes
Of Northern Nevada**

Victor O. Goodwin

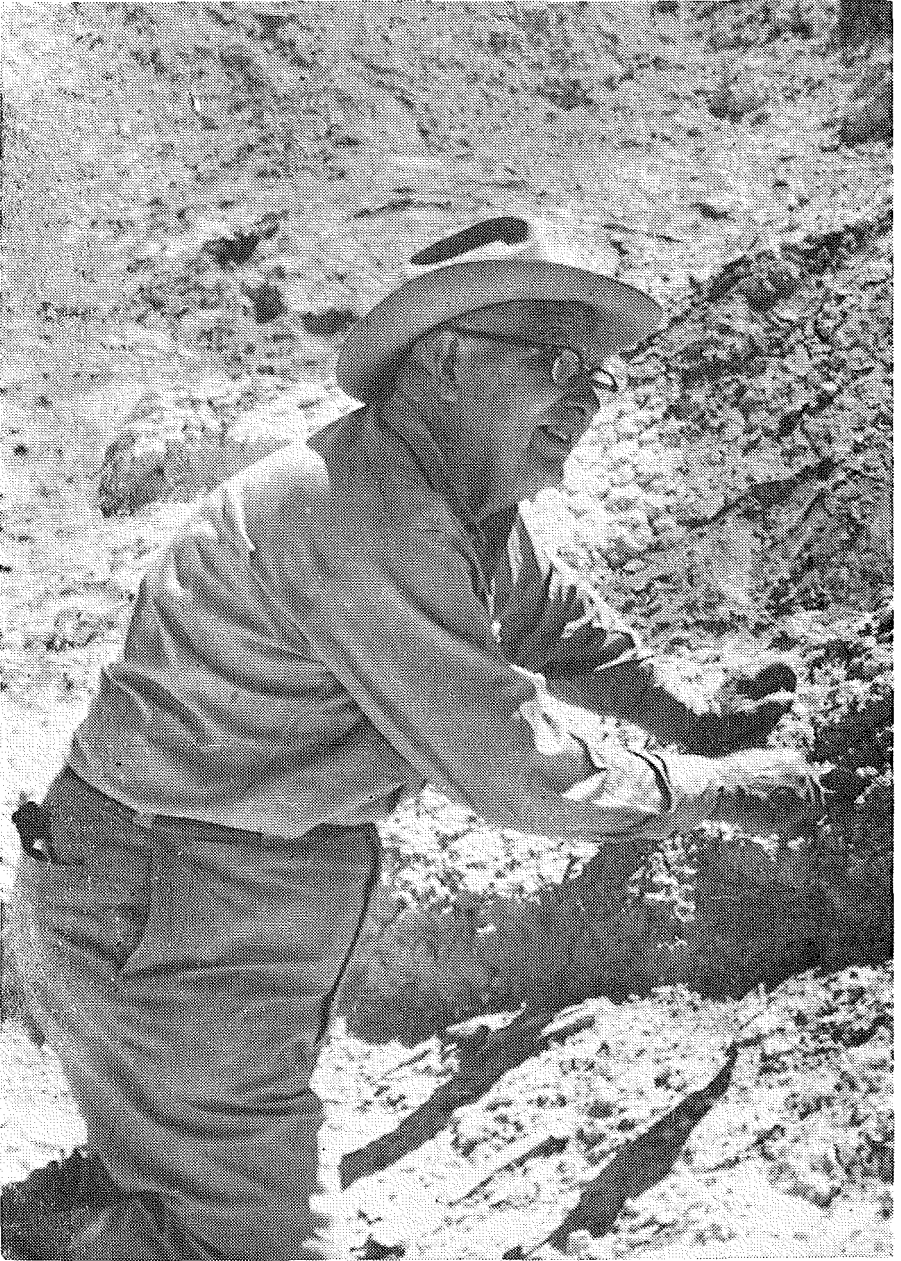


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MARK RAYMOND HARRINGTON
Father of Nevada Archeology

Ruth D. Simpson



DR. MARK HARRINGTON AT GYPSUM CAVE

Mark Raymond Harrington

Father of Nevada Archeology

Every science and most generations have their legendary figures, their loved and respected masters. Archeology is a young science in America, and so the great men are of but the last and present generations: Frederick Hodge, Alfred Kroeber, Alfred Kidder, Adolph Bandler, Edgar Lee Hewett, Mark Raymond Harrington, Franz Boas, Henry Shetrone, Emil Haury, Alex Krieger, Elias Sellards, to name but a few. Only one of America's great archeologists has come to Nevada—Mark Raymond Harrington.

Dr. Harrington should be here tonight but, while in mind and heart he is here, physically he could not make the trip. So I come to tell you about the man I believe has done the most for the whole spectrum of Western Archeology. The facts you will hear. I only wish he were adding his delightful stories and story-telling ability. I asked Dr. Harrington to write an introductory comment and so I bring you now his greeting:

"I would have enjoyed appearing here in person but, at my age and pestered by arthritis—which makes walking slow and difficult—I decided not to come except in spirit. Anyhow, Miss Simpson can tell you of my adventures in Nevada archeology better than I could.

"However, I would like to tell you about my first day and night of Nevada archeology. When L. L. Loud and I started work in Lovelock Cave, we found it very dusty, as a dry cave should be, and by quitting time we were covered with the tarnation stuff. When we started to leave the cave, we saw a beautiful lake in the valley to the south. We decided to have a swim and wash off the awful dust. When we arrived at the apparent shore there was no lake. The whole thing was a blanket-blank mirage. The cussed dust was to be removed only with our precious drinking water.

"We were quartered in an abandoned cabin and I remember that night on account of the coyotes. Sometimes they were howling at the moon; sometimes chasing some critter around our cabin, so there was little sleep our first night in Nevada.

"Now my good wishes to you and to Nevada. May the second hundred years give you as much of which to be proud as have the first. Continue to guard your heritage well."

Before tracing Mark Harrington's career and the development of Nevada archeology, it might be well to look at our heritage of western

American archeology and at some of the current concepts and interpretations.

Archeologists believe that Man reached America from Asia across a land-bridge while glaciers covered much of the continents and the level of water in the oceans was low, thus exposing the land-bridge. Man moved, not as a migrant, but as a hunter, back and forth with the herds. Ultimately the hunted and the hunters reached the grasslands of the High Plains and spread on, east, west and south. Those who came west moved into the Great Basin where many lakes and connecting rivers were separated by low mountain ranges. Most famous of these lakes were Bonneville, Lahontan, Russell, Owens and Manly. All have shore features that reflect several periods of high water which would correspond to the periods of heavy rainfall and glaciation.

We do not yet know when Man reached America, nor when he first reached the Great Basin. Radiocarbon dates indicate that he was in California, Nevada and Texas at least 30,000 years ago. If that is true, then Man must have come from Asia several thousand years earlier.

We believe that the early hunters may have been basically scavengers and killed only small game; that they may not have become great hunters until they developed weapons that could be thrust or hurled—weapons tipped with sharp stone—and this would appear to be less than 20,000 years ago.

Many hunting groups with specialized points came and went in the West. About 5,000 years ago, as the country became drier and game less abundant, food gathering and ultimately food growing became more important. Gradually, people in the West became more sedentary, built permanent homes, became farmers. These people we call Basket-makers and Puebloans, based on culture traits, since we do not know who they were. In recent centuries, with increasing aridity, most of the farmers moved away and only semi-nomadic hunting and gathering peoples who could move from spring to spring stayed in much of Nevada and the Southwest. Farming groups remained only at sites of permanent water. These were the peoples, struggling to survive and protect their way of life, whom the European explorers met and tried to conquer.

Now, in a few broad strokes, let us rough-in the background of the study of American archeology as Dr. Harrington found it more than sixty years ago.

While there was an awareness of the American Indian and of the fact that he had occupied this continent for an undetermined number of centuries, there was no organized scientific study of American arche-

ology until the mid-nineteenth century, and even this was but a first uncertain step until after the Civil War.

One of the first vital moves toward a scientific study of the Indians as well as of the natural sciences was John W. Powell's exploration of the Colorado River and his subsequent establishment of the Smithsonian Institution.

By the turn of the century, famous names were at work on American archeology and ethnology, among them Prof. F. W. Putnam, Ernest Volk, George Pepper, Franz Boas, Marshall Saville. Younger men were beginning to gain stature now, too: Frederick Webb Hodge, Dean Byron Cummings, Alfred Kidder. Learning the profession from these men as well as from the academic halls of Columbia University was a young student named Mark Raymond Harrington.

Born in Ann Arbor, Michigan, in 1882, Mark Harrington, whose father was an astronomer, learned about Indians from songs his grandmother sang to him and then, when his family moved to the state of Washington, from members of the family of the Dwamish chief Seathl for whom Seattle was named.

Young Mark liked Indians, but when his family moved to Mt. Vernon, New York, he couldn't find any Indians with whom to be friends, so he began hunting for the signs of old Indian campsites. When he found such evidence he took it to Prof. Putnam at the American Museum for identification. They became closely associated and Prof. Putnam did much to direct the early career of Mark Harrington.

Not yet through high school, Mark Harrington found it necessary to leave school and go to work. He went to consult Prof. Putnam, who found a place on the American Museum field crew for the boy, provided he would learn field technique first. Prof. Putnam made this possible by getting him a job on Ernest Volk's crew then digging near Trenton, New Jersey.

At Prof. Putnam's urging, Mark went back to school when he had earned a little money and subsequently he obtained a scholarship to the University of Michigan and to Columbia where he obtained a Master's Degree in Anthropology in 1908. That same year he went to work for George Heye and the Museum of the American Indian, a position he held, except during the period of his Army service, until 1928, when he moved to Los Angeles to become chief curator of the Southwest Museum, a position he still holds.

For the Museum of the American Indian, Mark Harrington collected rapidly disappearing ethnological material, dug ethno-historic

sites, conducted archeological excavations in Cuba and throughout the eastern United States. Probably his most valuable archeological contribution from those early years would be the excavation of Ozark Bluff-Dweller Sites, the report of which was published only recently by the Museum of the American Indian. Late in his career at the Museum of the American Indian, Mark Harrington was sent to Nevada where he began his truly unique contribution to American archeology.

* * *

We have indicated that scientific archeology did not begin in America until the mid-nineteenth century. For the West, archeology had a different meaning. This was time of exploration, of colonization, of nation-building. . . . "Survive Today and Build for Tomorrow." . . . there was no time to dig into the Past. Archeology, therefore, was a matter of observation.

And some of the best archeological and ethnological observations made in the West were made in the territory which became Nevada. The first recorded statements regarding Indians of the Great Basin were made by the first Spanish explorers, Father Garces and Father Escalante, in 1776-77. Fifty years were to pass before Jedediah Smith passed through the region and recorded well all that he saw. He followed by eight years the 1818 expedition of fur traders under Peter Ogden which discovered the Humboldt River.

The records of Capt. Bonneville's expedition in 1833 and Gen. Fremont's in 1843 tell us much about the living Indians. The first known reference to Nevada's archeology is Jedediah Smith's account of a salt cave containing artifacts in southern Nevada. That was noted in 1827, nearly 100 years before excavation by a young archeologist named Mark Harrington.

Scattered through the literature of the late 19th and early 20th centuries are intriguing references to Nevada's archeological potential, but no conclusive reports.

In 1867, for example, Bancroft made reference to ruins in southeastern Nevada; in 1904 the *American Anthropologist* carried an article describing Indian pottery in caves in the Spring Mountains near Las Vegas; in 1912 Drs. Kidder and Mera visited southern Nevada and recorded evidence of Pueblo occupation. Also in 1912, the University of California sent an exploratory crew into Lovelock Cave under the direction of Llewellyn L. Loud. This was the first scientific archeological expedition to work in Nevada.

Mr. Loud was sent to the cave after bat-guano removal was halted because the debris from prehistoric occupation was so thick that guano could no longer be profitably screened from the cave fill. Many of the artifacts recovered during the bat-guano screening were obtained by the Nevada Historical Society. Mr. Loud excavated the northeast end of the rockshelter. After he left, private collectors continued to search the deposits and some of the beautiful things they found were purchased by George Heye who then sent Mark Harrington to investigate what might remain of the cave deposits. This was in 1924 and marked the beginning of Harrington's work in Nevada.

At Dr. Harrington's request, Mr. Loud joined in reopening the excavation of the cave which is situated on an intermediate shoreline of Pleistocene Lake Lahontan, on the Humboldt Lake arm of that ancient body of water. Harrington and Loud found that guano-and-relic hunters had torn up the surface layers of the deposit, leaving a jumbled mass of guano, grass matting, broken shafts, cordage, beads, sandals and other smashed evidence of man in the wind-blown sand. Much of the deposit that Mr. Loud had left, however, was still intact and ranged in depth from a foot to fourteen and one-half feet. Only the upper levels had been destroyed, but that was enough to destroy the floors except in one small area where the stratigraphy was intact.

As often happens in caves, the occupants dug storage pits into the cave floor of their day. This often destroyed buried deposits left by earlier peoples. However, most of the finest specimens in Lovelock Caves came from the more than forty storage pits Harrington and his crew excavated. One of the famous finds of Lovelock Cave came from beneath a false bottom in one of these pits: a bundle of duck decoys. Another pit was filled with the feathers of eagles, pelicans and other large birds.

Although the only physical means available to Dr. Harrington for dating the cave was a count of the clay deposits that had been laid down near the entrance of the cave, many of them paper thin, his margin of error was so slight when his estimated dates are compared with those now derived from C-14 dates on the perishable specimens that Gordon Grosscup remarked in his *Cultural History of Lovelock Cave, Nevada*, (U.C.A.S. No. 52, 1960): "Modern dating methods have shown that Harrington's results . . . were remarkably close."

Nor have modern techniques changed Dr. Harrington's determination of Early, Intermediate and Late as the three culture phases of the Lovelock occupation . . . 2000BC-1000BC, 1000BC-IBC, IBC-900AD.

While Dr. Harrington was working at Lovelock Cave, Governor James G. Scrugham, who had an intense personal interest in Nevada archeology and ethnology, was alerting his friends to watch for important indications of new sites. Clues to such a site were reported by John and Fay Perkins, living in Overton. Governor Scrugham sent for Dr. Harrington, requesting that he join the governor's party on an inspection tour of the area in October, 1924.

The site proved to be a vast sprawling series of low walls and a multitude of pottery sherds and artifacts strewn over a sanddune area more than five miles long along the east side of the Muddy River in Moapa Valley near St. Thomas. Even a cursory examination showed that numerous culture horizons were represented and that here was proof of a well-developed Pueblo occupation in southern Nevada. The location was named *Pueblo Grande de Nevada* although it came to be known popularly as the *Lost City* since it may have been the Pueblo ruins recorded by a Mormon exploring party and noted by Bancroft in 1867.

Mark Harrington returned to Lovelock Cave to complete the excavation on all deposits not protected by rockfalls. Governor Scrugham set in motion plans for the excavation of the Lost City. He requested that the Museum of the American Indian place Mark Harrington in charge of the excavation, arranged for the state of Nevada to assist with trucks and diggers, and arranged for financial assistance from Smithsonian and Carnegie Institutions—assistance which would make possible a general survey of the lower Moapa Valley. However, excavation at the Lost City consumed nearly all of Dr. Harrington's time in 1925 and 1926. The survey was confined to the areas around the Lost City and St. Thomas. It did include the exciting salt caves south of St. Thomas and the mesa-top west of the Muddy River eight miles northwest of the Lost City where a large Pueblo ruin awaited excavation in a future year.

While Dr. Harrington was to return many times to southern Nevada, the Lost City excavation caught public interest more than all the others—perhaps because advanced human activity, an advanced culture, was being shown to exist where none had been known before.

In talking about the early work Mark Harrington says, "It is true that . . . pottery had been picked up in the Moapa Valley, but no one had done a bit of digging; no one knew that the Valley had supported a large farming population clustering about a veritable city; . . . and of course no one dreamed that this was one of the places where Pueblo civilization began to take form."

Mark Harrington came to work at Lost City with a varied crew including men from New York, representatives of the State of Nevada, workers from several Indian tribes. When they arrived, there sprawled before them the largest Pueblo settlement in Nevada. Building followed building for more than five miles along the east bank of the Muddy River. High dunes overgrown with brush buried most of the walls. Off to the east, walls of buildings could be seen encroaching on the flanks of Mormon Mesa. There they were exposed though badly weathered. Since access was easier and it would be possible to determine the true nature of the ruins, the crew went to work on the slopes of Mormon Mesa.

It was soon apparent that the ruins represented several stages of Basketmaker-Pueblo development. Most of the walls were down, many destroyed by rain and wind, but artifacts that had not washed away—pottery, stone tools, even some ornaments of bone and shell—told much of the customs and ways of life of the ancient peoples. Pit-dwellings preserved a record of Basketmaker occupation. Even that first year Dr. Harrington knew that both Basketmaker and Formative Pueblo peoples had lived at Pueblo Grande de Nevada.

During the second season, work was concentrated among the buried standing walls of the Pueblo. The largest buildings were erected around courtyards. However, all appear to have been but a single story high. To the end of the occupation, masonry remained crude and most construction was of layers of adobe.

In the buried houses beside the grinding tools, arrow points, skinning tools, pottery and ornaments are the mute evidences of the way these people lived: corn cobs, beans, squash and pumpkin seeds, bits of cotton and cotton cloth tell us that these were farmers, just as the seeds of wild plants and the bones of many game animals tell us that the people also hunted and gathered the natural foods.

Mormon records tell that old ditches ran into the area from the Muddy River, so it may well be that these people, like the desert-dwelling Hohokam of southern Arizona, irrigated their crops.

Among the perishables found in protected graves and caves near the Lost City were many pieces of cotton wearing apparel, yucca sandals, rabbit-skin and feather baskets, bits of the colored minerals used for paint.

During 1925-26, Dr. Harrington and his crew excavated 46 houses (both pit-houses and surface dwellings) and numerous cists and graneries. Many other houses were partially excavated. The largest house

excavated contained nearly 100 rooms. Several building periods were represented in these larger ruins.

In addition to the actual work on the Lost City, the crew spent some time, in 1926, in a survey of the Virgin River and ten days excavating salt caves reported by Harrington's loyal workers, Fay and John Perkins. Limited excavations were conducted in a cave on each side of the river and a thorough excavation was made of the largest cave high in the cliffs on the west bank. There a long passage led into the hill composed of clay and gypsum. The passage rose steeply to a chamber hollowed out of the salt. A deposit of broken chunks of salt littered the floor and the stone hammers, used in prehistoric times to hack out the salt, were found in this debris as were partially burned torches, digging sticks and various small tools, bits of woven cloth, food bones and fragmentary rabbitskin blankets and yucca sandals. Pottery was found in caves 1 and 2 but not in 3. Dr. Harrington has never felt that the salt caves were sufficiently excavated to establish the whole story, but he did learn that two different peoples mined salt there.

Perhaps some of you do not know how the prehistoric miners reclaimed the salt. Digging by the light of burning torches, they hacked deep circles around segments of salt, undercut as far as they could and then broke off the pedestals.

After two seasons of work at the Lost City and related survey work on the lower Muddy and Virgin Rivers, Dr. Harrington went back to New York. In 1927 he returned only for a month, beginning the excavation of Heye Cave at Pyramid Lake. Unfortunately, local Indians forced a halt to the work just when sandals, pottery, featherwork, etc., indicated a significant discovery. This was the only time in his long career that Indians ever refused to permit Harrington to work. Then believed to be a Basketmaker site, it is now thought likely that Heye Cave, like the ancient Winnemucca Caves excavated for the Nevada State Museum by Phil Orr, contained evidence of an occupation which, in part, was much older.

Mark Harrington terminated his association with the Museum of the American Indian and came to the Southwest Museum in Los Angeles, assuming his duties there in 1928.

As soon as Dr. Harrington was settled in his new job, his interest returned to Nevada and, in January of 1929, he returned with his first Nevada expedition representing the Southwest Museum. There were two major objectives: the long-postponed survey of Moapa Valley;

and excavation of a few key sites which Dr. Harrington had visited in 1925 and 1926.

In telling of his Moapa Survey in Southwest Museum *Papers* No. 4, Mark Harrington wrote:

“(There is) water that was too hard to handle to be attractive for irrigation purposes to the ancient farmers. Take the valley of the Colorado River, in Nevada. . . . The Virgin River, tributary to the Colorado in Nevada, was almost as difficult for the ancients to harness . . . and consequently we find ruins of permanent villages along its course only in the most favorable spots. But when we come to the Moapa or Muddy River . . . here is indeed another story. Not too large . . . with low banks making it easy to turn the water into ditches with the crudest brush dams; abundant level land, most of it unusually fertile . . . well nigh perfect from the aboriginal farmer’s viewpoint. Consequently we find an almost unbroken line of ancient villages . . . from the Muddy’s junction with the Virgin to the large springs forming its source some 30 miles to the north.”

Seventy-seven ruins were recorded during the 1929 survey of only the lower 16 miles.

During the survey, it became increasingly apparent that Basketmaker and Pueblo II or Development Pueblo were predominant cultures, but that there was a strong Southern Paiute occupation; considerable evidence of infiltration from the Colorado River by the Mojave; and a well-represented Classic Pueblo (Pueblo III) occupation which was shown most clearly at Mesa House.

While Harrington’s main crew was conducting the Moapa Valley Survey, a team under Irwin Hayden began digging Mesa House. This was a large ruin-series extending for several miles along the west side of the Muddy River. Harrington had visited Mesa House in 1925 and determined that ultimately he would excavate it as well as the Lost City. The winds that buried so much of the Lost City under sand dunes, swept much of Mesa House from the rocky crest it occupied.

In ground-plan, Mesa House homes and storage rooms were built around a large courtyard. Eighty-four rooms and single-unit houses were excavated. Material found ranged from Basketmaker III through Pueblo III, the emphasis being on material slightly more recent than at the Lost City, *i.e.*, Early Pueblo III.

In addition to Mesa House, excavations were also carried out in 1929 at Paiute Cave, a small cavern south of Overton. It was while opening the clay-silt barricade which filled the cave entrance, that Mark Harrington again had the idea of using the laminated clay to

count the number of years since the filling of the entrance began—one of the wonderful pioneering improvisations Harrington employed so well in analyzing the sites he dug in an era when science had not provided archeologists with all the modern tools of geochronology.

Inside the cave, Harrington and James Scrugham, Jr., son of the Governor who brought Mark Harrington to Nevada, found a rich deposit of Paiute basketry, textile fragments and many other typical Paiute objects—arrowshafts, mescal knife, a fire-drill, etc., as well as some early historical materials—clothing and an iron hoe.

Beneath the Paiute occupation was a sterile layer of clay and below that, a deposit containing pottery and other artifacts similar to those from Mesa House. Storage pits dug at the back of the cave during this period suggest that Pueblo use of the cave may have been primarily for storage.

As part of the Moapa Valley Survey, Harrington, in 1929, also directed the partial excavation of Scorpion Hill Ruin near the railroad siding Tokio Station. Four rooms excavated contained burials with rich offerings including key-hole limpet shell ornaments from the Santa Barbara coast.

“If 1929 sounds like a busy year, it was.” Thus Dr. Harrington summarizes the field season. But these were the days when Harrington and Charles Amsden could give full encouragement to a strong Research Program. Although money was lacking and America was heading into the Depression Years, the Museum continued to find a way to get Harrington and his crew back in the field.

If 1929 was busy, the early 1930s continued the pace. Indeed, we may describe the period 1930-1933 as the “Finest Hour” of Dr. Harrington’s career, of the Southwest Museum’s contributions to Science, and as one of the truly definitive and crucial periods of American Archeology.

It was in 1930 that Mark Harrington began work at Gypsum Cave. In the foreword to Mark Raymond Harrington’s memorable publication on Gypsum Cave in Southwest Museum *Paper* No. 8, Frederick Webb Hodge quoted Sir Arthur Keith: “The way from the Old World to the New was open to Pleistocene Man if he cared to take it . . .” and Dr. Hodge added “his fossil remains will yet be found in America.” . . . Mark Raymond Harrington, in his *Introduction* wrote, “It has seldom been the privilege of an archeologist to uncover traces of really Early Man in America, of Man who occupied our continent when climates differed . . . and strange animals roamed the country. These privileges

have recently been mine. . . . In order to obtain such facts it is necessary for the investigator to approach his problem with a perfectly open mind, uninfluenced by the theories and prejudices of others”

The first mention of Gypsum Cave is seen in Harrington's field notes made while on the 1924 trip with Governor Scrugham. Harrington wrote: “There is a cave about 20 miles from Las Vegas called Gypsum Cave; John Perkins visited it . . . and gave me several pieces of atlatl darts” From that small beginning developed one of the most important archeological excavations made in this country even to this day.

Although he visited the cave in 1925, Harrington did not plan the excavation until 1929, when he visited the cave again and saw the evidences of ground sloth.

Without doubt, Gypsum Cave is one of America's most definitive sites—and, twenty years after the excavation, it became even more important when Dr. Willard Libby obtained C-14 dates between 8500 and 10,000 years for the main culture horizon. Mark Harrington's report on the excavation is one of the classics of the American archeological literature.

The cave is in a limestone spur of the Frenchman Mountains east of Las Vegas. The large steeply sloping entrance passage was partially filled with rock-fall when work began. Six chambers were opened in the cave which measured 300 feet long and 120 feet wide. While some recent archeological material was found on the surface and in the upper deposits, the important evidence came from more than eight feet down in the deposits and included large quantities of ground-sloth remains overlying and in association with cooking fires. Also beneath sloth dung and hair were found the previously unreported Gypsum Cave Type atlatl points and parts of their wooden shafts. Of particular interest were the painted foreshafts which to this day represent our oldest record of prehistoric Indian art. One of the dart points lay just beneath a sloth skull. Less impressive but significant artifacts of comparable age were found throughout the deep deposits. These would include part of a fiber torch with the bones of a baby sloth; numerous partly burned sticks and part of an atlatl foreshaft beneath a layer of sloth dung which in turn was overlain by a solid layer of gypsum; a polished wooden dart shaft in a mass of sloth hair, etc. Vegetal remains in these same deposits are of plants which do not grow in the arid region today.

As Mark Harrington said in his report: “If there had been only one find or even two or three, some doubt might remain; but with

twelve distinct finds, not including scratched sloth bones and other minor items, we cannot doubt that man existed . . . before the ground sloth and several types of native horses and camels had become extinct. . . . Having settled this . . . let us turn to another equally important question: Just when did Man encounter the ground-sloth in Gypsum Cave?" . . . After four pages of discussion Dr. Harrington makes this statement: "If this be true, our time-chasm between our people of the sloth-layer and the Basketmakers would be 7000 years and Man would have met the sloth in Gypsum Cave about 8500 B.C."

Needless to say, this comment brought down the wrath of those archeologists who had no faith in Early Man in America. Twenty years later Dr. Willard Libby confirmed Dr. Harrington's comment by dating the overlying sloth material above the painted dart-shafts and the Gypsum Cave points at 8500-10000 B.C. And how did the critics react? Harrington had reached the right answer but it was just a guess based on incorrect deductions.

Writing the Gypsum Cave publication and fighting the depression of 1932 personally and for the Museum were not enough to keep Mark Harrington out of the field, or out of Nevada. So, with his wife and son, he returned to survey the Smith and Baker Creeks region north of Gypsum Cave and near the Utah border. The survey yielded a number of caves containing evidences of occupation. In some were kachina-like pictographs averaging two feet in height, most of them masked and many had horns. Artifactual material did not indicate if these were early Pueblo or late Basketmaker. However, they did strongly suggest figures at other sites in Utah now known to be late Basketmaker.

Nineteen hundred and thirty-three was another big year in the career of Mark Raymond Harrington and in the development of Nevada archeology. Early in the year, the Gypsum Cave report was published, thus giving interested scientists and laymen everywhere the full picture of the oldest cave site yet found in America—and cave sites are especially important because here may be preserved the whole story of the occupation whereas in an open site the elements often destroy more than 90 percent of the human record. For example, there would be no likelihood of an open campsite 10,000 years old yielding painted atlatl shafts, polished foreshafts, burned torches, sloth hair, etc. The projectile points and other lithic implements would have remained and perhaps the sloth bones and that would have been all.

Mark Harrington was no longer alone in his interest in Nevada. Other anthropologists were becoming active and so were paleontologists.

In the spring of 1933, Mr. Fenley Hunter and a crew representing the American Museum of Natural History searched the old lake beds north and west of Las Vegas in search of Pleistocene paleontological material. During this search, they made a find which was to have a far-reaching influence on American archeology for at least 30 years (which brings us up to the present), and who can say for how many years more the pros and cons of Tule Springs, Nevada, will be discussed. In the Vegas Wash near Tule Springs, Mr. Hunter found a large bison skull and in the matrix near the skull was a large obsidian flake obviously struck by Man. With no obsidian in the region, how did the flake reach its location? At the moment, the find, though of prime interest, did not involve Southwest Museum or Mark Harrington. He was concerned over the construction of Hoover Dam, the impending loss of the archeological record of the Lost City and much of the Virgin River Country with which he was so closely associated. Without funds, it did not seem that Southwest Museum could fight clear of the depression to send an expedition any place.

By April, however, funds had been obtained from friends of the Museum and Mark Harrington was on his way to salvage what he could of the archeological story of the lower Virgin River. At the confluence of the Virgin and Colorado Rivers he had seen scattered sherds while doing a survey in 1926. This was the destination of Mark Harrington's first search. Approach to the area was difficult as roads and settlements were abandoned. Even the houses were being torn down as they would soon disappear beneath Lake Mead—or, as Harrington said: "The houses are now being pulled down even in the picturesque Mormon village of St. Thomas, for fish will be swimming through its streets before long."

It was a difficult trip to the mouth of the Virgin and the abandoned Bonelli Ranch, but once there Mark Harrington's memory proved correct. There were abundant sherds and excavation led to a late Basket-maker settlement, including pit houses in which the occupants had been buried with their possessions and then the houses burned. Much of the record of the Bonelli Site, however, was inundated in the first rise of the waters of Lake Mead. Lack of funds precluded completion of the excavation.

Following the work at the Bonelli Site, Harrington was returned to Nevada under grant from the Carnegie Institution to follow up on the discovery made earlier in the year at Tule Springs northwest of Las Vegas by Fenley Hunter of the American Museum of Natural History.

By October Dr. George Simpson and others of the American Museum felt that the obsidian flake in the carbon-impregnated matrix with the bison skull was a really crucial discovery and they turned it over to Mark Harrington and the Southwest Museum. Harrington and Fay Perkins found and excavated other deposits of carbon containing bones of horses, bison, mammoth and especially camel. Some of these bones were burned, others split to obtain the marrow. Two bone tools were recovered from a deposit of carbon.

It was Mark Harrington's opinion that this "camel-hunter's camp" was "considerably more than 10,000 years old, more like 25,000 years old." Again the skeptics called him wrong and it was 21 years before C-14 dates obtained by Dr. Libby showed the site to be more than 23,800 years old.

In 1933, numerous sites showing the association of Man and extinct animals were being reported and since the inventory of specimens was poor at Tule Springs, work was discontinued. In November, Harrington answered a call of the National Park Service to return to the Lost City and direct the Civilian Conservation Corp's efforts to salvage material from as yet unexcavated portions of the Lost City, soon to be isolated or inundated by Lake Mead. Excavation continued until water actually lapped into the rooms where the men were digging. This marked the first time that the United States Government had sent its CCC workers on an archeological salvage job, the first time they had been used in archeological conservation. Again, it had been Nevada's Governor Scrugham who arranged this project.

This was a large scale excavation covering far more than Mark Harrington and his small staff could ever have hoped to clear. Three periods of occupation became apparent in the excavation of the central pueblo. The material evidence, however, was much as Harrington had seen it a few years before. Fireplaces in the small dwelling-rooms contained ashes and charcoal and quantities of burned food remains. These rooms had lain under the shelter of six feet or more of sand-dunes. The plazas yielded a treasure-trove of items of daily use.

The work at the Lost City continued through the early and late months of 1934. During those two periods, 17 pueblos were cleared. In addition to directing this work, Mark Harrington also guided the cataloguing of the several thousand specimens; the building and installation of a small museum above the projected high-water line, and the restoration of house ruins above the high-water line.

Between the two Lost City expeditions in 1934, Harrington returned to the Baker-Smith Creek region and enlarged the excavations

begun in Smith Creek Cave in 1932. The regional survey was also continued and several more caves were recorded as well as early occupation-sites on the various shores of Lake Bonneville. Smith Creek Cave yielded many bones of extinct horses as well as scattered bones of other large animals, birds and some fish. Archeologically the evidence was not conclusive—bits of basketry, worked sticks, pieces of juniper bark, etc.

When Mark Harrington returned to the Lost City in the fall his work was to continue there until the hot weather in 1935, and his projects were to be several. Not only must he save what he could at the Lost City, there must also be a survey of the Virgin River Valley soon to be drowned, and a survey of the area to be included in the proposed Hoover Dam State Park. On this latter job he had the valued services of Louis Shellbach.

In reporting on the survey, Mr. Shellbach indicated his feeling that the government was too concerned over developing the region above the proposed high-water level and hence too little time was spent in the general survey of scattered sites soon to be under water. However, some idea was gained of Basketmaker, Pueblo and Southern Paiute sites and their locations were recorded. Only a few sites could be excavated. One of these was at Willow Beach where stratified occupation was noted during the survey and subsequently excavated in 1936. A pre-pottery horizon was exposed more than six feet below the surface. Even elk bones were found at this lower level and artifacts indicated an age not less than early Basketmaker.

Mark Harrington's assignment as director of the Lost City project ended in July, 1935. After that he continued to serve as a consultant in archeology to the Park Service for their work in the Hoover Dam region. More and more, Southwest Museum duties and discovery of early sites in California—more within the province of the Southwest Museum—turned Harrington's attention to California archeology. However, in 1942 he returned at the urging of his and the Museum's valued friend, Brad Stuart of Moapa, to visit Black Dog Cave. This was just one of numerous significant sites Brad Stuart found and hoped Southwest Museum could excavate, but finances never permitted the large-scale expedition for which he and Harrington hoped, and now that dream cannot be fulfilled.

Only exploratory excavations were conducted in Black Dog Cave, but these were enough to show a richly stratified cave deposit extending from modern Paiute back through Basketmaker II times. Intricately

fashioned ornaments, bone implements, dice made from corn-cobs, a Basketmaker II dartpoint in its original haft were but a few of the exceptional articles collected. One string of beads, found in a Pueblo II pottery canteen, was made of overlapping olivella shell beads strung on native hemp braided in a chain-stitch.

In 1954 came the date of 23,800 years for Tule Springs and in 1955 Harrington returned to that important site and began the excavations which were to be carried forward for him in 1955 and 1956—excavations which yielded one stone tool, many more bones of mammoth, camel, horse and bison, and carbon subsequently dated at 28,000 years.

Between the 1955 and 1956 field sessions, an honor richly earned and too long delayed was bestowed upon Mark Raymond Harrington: an honorary Doctor of Humanities degree. While based on his work throughout the United States and Cuba, it was his work at the Lost City, Gypsum Cave and Tule Springs that formed a prime element in the decision to accord this recognition of a life-time of dedicated service.

As Dr. Harrington watched the efforts being made in 1963 to wrest further archeological information from the lake beds at Tule Springs through the use of heavy mechanized equipment, many people thought this was a prophetic meeting of two eras; the end of delicate handwork; the beginning of large-scale swift mechanized archeology. In reality, nothing known to us now can replace the dental tool, whiskbroom and trowel in the hand of an expert. The bulldozer proved at Tule Springs that it is a fine tool for exploration; but once the site is located, as Dr. Harrington said "there is no easy way."

In October of this year (1964) it will have been forty years since Mark Harrington was called to Nevada. What did his coming mean to the archeology of this state, of the Great Basin and of North America?

Although disfigured somewhat by amateur collecting and looting, the prehistory of Nevada was still largely intact, the story could still be read from most of the deposits. Harrington was able to see and weigh all the elements, not just what scraps careless diggers might have left. The undisturbed geology enabled him to read age and the record of what happened with almost miraculous success.

Instead of many institutions working more or less in competition, Harrington moved from site to site, pulling the story together, again being privileged to see all the elements in perspective.

You have called Mark Raymond Harrington the Father of Nevada Archeology. Certainly some special accolade should go to Governor James Scrugham and the State of Nevada for selecting Dr. Harrington.

Granted, had Mark Harrington not come, other archeologists would ultimately have brought to light Nevada's rich heritage, or part of it. Perhaps someone else would have recognized the potential of Gypsum Cave. Perhaps—

Happily we are not concerned with "perhaps". We have the facts and we can say that Dr. Harrington's eleven years of continual work brought results not equalled in any other state. Around the world when we speak of the story of America's earliest archeological chapters, thoughts turn at once to the southern Great Basin—to Nevada.

Because of Dr. Harrington's work at and around the Lost City, we learned the role of Nevada in the development of Basketmaker and Pueblo Cultures, beyond the tight confines of the Four Corners Area. Had it not been for his preliminary work, no salvage "crash program" could have learned the story ahead of the rising waters of Lake Mead. No one without Mark Harrington's faithful patience would have salvaged the details of those ancient sites as water crept into his footsteps.

Because of Dr. Mark Raymond Harrington's pioneer work the antiquity of Man in the West was confirmed.

Nevada and the whole Great Basin possess a rich heritage. We have seen what Mark Harrington did with the simple tools of his profession and an unique power of observation and interpretation. We have seen laboratory techniques of which he never dreamed confirm his work. What lies ahead?

Some people say that dirt archeology and field geology are on the way out. Dr. Harrington doubts this. Aerial photographs supplement but do not replace the geology pick and hand lens. Machinery helps but cannot replace the trowel and whiskbroom. Of greater concern to the archeologist is the ever-accelerating rate of the destruction of the landscape and the archeological record it contains: dams, housing projects, shopping centers, freeway systems, spreading cities, the mushrooming population pushing into all parts of the country; people on a holiday who, looking for fun, use pottery for target-practice and burn dry cave deposits just for kicks, people who write their names on ruined walls and across ancient petroglyphs. Once a site is mangled, its story is lost forever.

Dr. Harrington sends this appeal to you as loyal Nevadans interested in the past of your state: make the greatest contribution you as individuals can make; work to educate the people, make them not only aware of but lovers of their heritage; make them proud to have a ruined pueblo or a Basketmaker pithouse on their ranch; make them work as

Brad Stuart worked to keep inviolate the rockshelters and petroglyphs, the shoreline sites and Paiute camps, the pueblos and campsites; urge your museums and universities and your government to search and study and preserve.

Dr. Harrington believes that we know only part of the story. Persistent open-minded searching, and proper use of new techniques may well reveal whole new facets of Nevada prehistory.

I asked Mark Harrington to write my last comment for you this evening, so I close with his thought: "I think Nevada is an archeological treasure-house still, with many caves and out-door sites, which, if properly excavated—and I mean *properly*—will reveal the whole story of Man in the West from the first visitors about whom we probably do not know as yet, and the early hunters who killed animals now extinct, up to the Paiutes and Shoshones who are still with us and from whom we could learn so very much about their languages and ways of living and thinking. The work must be done now while there is still time."

RUTH D. SIMPSON

Ruth D. Simpson was the Associate Curator at the Southwest Museum, California, for 18 years. She obtained her academic training at the University of Southern California and her field training at the University of Arizona. Her special interests are Pleistocene archeology, Great Basin archeology and petroglyphs. She has done field work for the Southwest Museum, Santa Barbara Museum of Natural History, Nevada State Museum, University of Wyoming, Smithsonian Institution and the San Bernardino County Museum. She is now working under a grant from the National Geographic Society.