

A History of Montezuma Well

By

Jack Beckman

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Dedication

To Al Schroeder, who, as a parks ranger from 1946 until he left Montezuma Well in 1950, not only kept detailed records of his stay there, but toured Arizona in search of all of the Back children. The children are gone now, but Al's carefully recorded stories of their family's occupation of the Well are an invaluable contribution to Arizona history.

For these records, and his generous response to my phone calls to his home in Santa Fe, I am heavily indebted.

Forward

Montezuma Well has been here a long time. As early as 600 BC it was used as a water source by many Indian farming cultures. Today, as a National Parks Monument, it is visited by thousands of tourists every year. Many are moved by what they see. After twenty ears as a ranger/volunteer, visiting with people from all over the United States and world, I was encouraged to share some of the knowledge I have gained.

This history of the Indian occupation of the Well has been well established by archeologists over the years, and is briefly included here. But the white man, who came in 1864 and is still around, created another story that has never ceased to fascinate me.

I have researched countless documents and interviewed dozens of people in order to build a history of the white families who pioneered the Well area. Foremost among them was the Back family, whose occupation lasted from 1888 to 1947.

After 1947, Parks records have helped create a continuation of the Back stories (and others), that I have found are interesting to most visitors. I say "most" because appreciation of the Montezuma Well varies form letters whose stock phrase seems to be "It was the highlight of our trip" to "just a hole in the ground, just a hole in the ground" mumbled by a man as he descended the rock steps and on past the Contact Station to his car. I have enjoyed them all.

Come and see for yourself.

Jack Beckman

A HISTORY OF MONTEZUMA WELL

compiled by
Jack E. Beckman

Part One: Pre-History

Montezuma Well, elevation 3681 feet had its beginning about 12,000,000 years ago. It is located in the Verde Valley of central Arizona, which lies between the Mogollon Rim and the Black Hills. The valley is about 15 miles wide and 35 miles long. A lava flow from an early volcano, Squaw Peak, dammed up an ancient river, creating a lake which, over a period of several million years, filled with limestone.

After the dike broke, the streams from the surrounding mountains cut through the limestone, leaving ridges of hard rock which is now called "rimrock country", or "the Rim". The limestone in the valley is, in some places, 2000 feet thick. The logs of present-day well drillers show caverns penetrated in the drilling process; and a lower portion of the valley, near Squaw Peak, 6200 feet high and considered to be the geographical center of Arizona, still shows evidence of the lava dike.

Montezuma Well pool is located in a travertine (re-deposited limestone) spring mound, 135' deep and 470' across, similar to those found in Florida. Some geologists believe that the sink hole was formed by a collapse of a cavern eroded out of limestone by the present spring. (Such collapses, on a smaller scale, are visible today in the road-building cuts on I-17 near the Montezuma Castle turn-off.) Others speculate that the sink hole was formed by the dissolving of a salt deposit. (One large salt deposit on the west side of the Valley was mined commercially in the 1920's.)

The Well's source of water is warm springs in the bottom of the pool which maintain a constant temperature of 76 degrees. (In winter, even today, vapor plumes often rise from the pool in the cold air. They can be seen for a distance of several miles.) The Well pool holds about 15,000,000 gallons of water. Springs in the bottom keep the pool at a constant depth of 55 feet, and a small 150-foot cave at pond level allows the water to drain out at 1100 gallons per minute. This flow empties through a ditch into Beaver Creek, which is fed by springs 14 miles north of the Well.

Montezuma Well provides a unique aquatic environment for plant and animal life. The highly carbonated water emerges from several vents at the bottom of the Well and contains high concentrations of dissolved carbon dioxide, much higher than most other aquatic habitats. Due to high concentrations of carbon dioxide and alkalinity, many groups of plants and animals are not found at the Well, the most notable being fish.

In the absence of fish predators, several small animals have modified their feeding and swimming appendages which has allowed them to thrive in the open water column.

One example is the small amphipod, *Hyaella montezuma*, which is less than 7 mm long. To the best of our knowledge, this animal is not found anywhere else in the world. These amphipods feed on the abundant microscopic algae throughout the year, and produce 787 lbs. dry weight animal tissue each year.

The high production of amphipods in Montezuma Well provides a substantial food source for several invertebrate predators, namely the leech (*Erpobdella montezuma*), which is also endemic to Montezuma Well. Since the leech is blind, it swims in the open water column at night and uses special sensory structures near its mouth to detect the swimming signals of the amphipod. Ironically, the leech is at the top of the food chain in the open water column of Montezuma Well.

Since predators are more aggressive during the night, the amphipods swim into the protective confines of the vegetation along the shore after sunset. However, this refuge is no longer safe during the day because aquatic insects use their keen eyesight to prey on the vulnerable amphipod during the daylight. As a result, the amphipods are constantly on the go in the Well to keep from being eaten!

They spend their evenings in aquatic vegetation to avoid the voracious leeches, and avoid the insects in the shoreline vegetation by escaping to the open water during the day when the leeches have retreated to the bottom. These ceaseless invasions go on every day of the amphipods's life!

Montezuma Well offers an excellent opportunity for scientific studies because it serves as a giant test tube in the heart of the Verde Valley. The active vents in the bottom of the Well are responsible for the year-round water temperature and food source, even though the Well occupies a semi-temperate region.

Archeological findings show evidence of human occupation of the Verde Valley as far back as 10,000 years, or earlier. There are large cat, canine, two-toed horse and mammoth tracks in some of the exposed shoreline areas of the ancient lake, or sea, formed by the dike. It is believed the vegetation, to support mammoths, was near-tropical, and was also a source of food for early man.

About A.D. 600 people from northern Mexico settled in the Gila and Salt River Valleys near Florence and Phoenix. They were farmers, and used the rivers to irrigate the desert. Over hundreds of years they dug over 1700 miles of canals, some as large as twenty feet wide and four feet deep. These canals brought water to sixteen species of desert plants.

The Pima Indians, who live there today, sometimes referred to as Tohono, or O'odham, are thought to be descendants of the Hohokam. When Spaniards first contacted the tribe, they recorded that it was supplementing its diet with "the innumerable fish that abound in the river." Among those fish was a humped-back sucker measuring up to a yard in length and weighing 13 pounds. Present-day Pimas have been known to find the humped-back suckers when they drain their canals. As late as 1949 the fish were caught for commercial purposes in the Salt River, up to 6 tons in a spawning season.

Sometime after A.D. 700, the Hohokam started to colonize at water sources along the way towards Flagstaff and Prescott. Many settled in the Verde Valley.

These people lived in pit houses, so-called because the floors were several feet lower than ground level. With support poles, rafters, and thatched roofs covered with mud, the pit houses were used to house extended families. Many such houses have been excavated in the Verde Valley, and the floor plan does not vary a great deal from the pit houses found in Phoenix.

(There are five pithouses on Montezuma Well property, which were identified by the abundance of broken pottery in the trash heaps. One of these pit houses has been excavated. After the floor was uncovered, postholes were located by scraping a trowel on its edge across the floor. When passing over a posthole, a circular color change appeared to identify the holes.)

The Hohokam, finding the Well water source on Beaver Creek, ditched it two miles west, following the natural Beaver Creek water course. From the main, or "mother ditch", there were laterals, serving

about 60 acres altogether. The water contained lime (at present, 600 pounds every 24 hours) which was dropped as the water cooled. This lime was rehydrated and lined the walls of the Hohokam ditches so the system can easily be traced today. All the ditches on the Well property have walls of rock-hard travertine, some of which are 20 inches thick, looking very much as if they have been cemented.

The Hohokam raised corn, beans, cotton and squash, and probably other foods not so easily traced. There were community centers along a trade route from south of Phoenix to the present Hopi mesas in the north. Traders carried iron pyrite mirrors, copper bells, shells, turquoise and obsidian, parrots, parrot feathers and macaws, as well as choice pottery. Among the latter, black-on-white pieces from Wupatki and Kayenta areas, Elden Corrugated, and Winslow Polychrome have been found.

Whether rubber balls were used in the ball courts that are found in the Verde Valley is not known. The courts were grouped near large pueblos, and trading was often carried on during special events such as dances and ball games.

The Hohokam made jewelry, wove cotton cloth, and mined salt, all of which they traded. (When the large salt deposits in west Verde Valley were mined by the white man, tunnels were found containing torches; also evidence of death caused by cave-ins.) They also traded beans, corn, squash and other edibles.

The Hohokam population gradually grew, and around 1100-1150, was joined, or displaced, by the Sinagua tribe from the Flagstaff area. The name Sinagua is made up of two Spanish words: sin (without) and aqua (water). Since the Spaniards, who came later, found little running water in the Flagstaff area, it is generally believed that the Sinagua tribe came south in search of better land. It is postulated that the Sinagua also farmed the West Montezuma ranch by digging canals and using water from Beaver Creek, which caused less lime accumulation.

The Sinagua are credited with the introduction of stone houses, either in cliff openings, or free-standing pueblos. They, too, built ball courts. (Courts are indeed located all over (mostly) central Arizona. In 1983, the Hohokam Symposium in Phoenix reported that some 150 courts had been discovered to date.)

The Sinagua who settled at the Well had many neighbors six or eight miles to the north. There are eight pueblo-type ruins in Red Tank draw and Walker and Beaver canyons, plus a 60-room pueblo

on Sacred Mountain. All are located near water sources, and near petroglyph site concentrations. Many of the petroglyphs (Indian rock writing) are assumed to have been left by the Sinagua.

Around 1450, for reasons never clearly known, the Indians of the Verde Valley appear to have slowly moved out- some to the south and west, some to the north- or have reverted to hunting and gathering. There is no evidence of disease, or warfare. Drought in surrounding areas could have brought hungry people in, causing overcrowding, but that, too, is speculation.

One of the most frequent questions asked by tourists today is, "Why did they leave?" Over the years this writer has been fortunate enough to talk with archeologists Dr. Emil Haury, Keith Anderson and Al Schroeder, and we agree on some of the reasons for the exodus from the Well. Since the Indians left few notes behind, we probably did pretty well.

(1) The land had been farmed too long without fertilization.

(2) The Well Indians had lots of neighbors, both Sinagua and Yavapai. The Yavapai were in the Verde Valley before, during, and after the Hohokam and Sinagua occupation. Hunting could have become poor and firewood somewhat depleted

(3) There could have been a religious migration from the Well area. Fifteen Hopi clans interviewed by the writer claim some of their ancestors lived at the Well and that they migrated because of a serious religious happening.

It is believed that some of the Well inhabitants went south towards Phoenix, and west towards Prescott. Others went north to the land of the Hopis. The Hohokam Symposium papers speculate that some Hohokam returned to their parent area in the south. It is also believed that some of the Sinagua went into some, or all, of these areas.

In any event, the Indians walked in and walked out. They didn't just "disappear" like a coin in a magician's hand. The migrations were slow, like our own Pilgrim migration and subsequent marches across the continent in search of various things, such as a better way of life, land, religious freedom, open space, and gold.

In 1583, Antonio de Espejo, a Spanish conquistador, came through the Well area. He noted in his journals that they reached a cienaguilla (spring) which flowed into a small water ditch, and came to an abandoned pueblo, marching at times close to the Parras River.

It is thought that the reference to the ditch could have been to Montezuma Well.

Espejo's journals also indicate that there were no people living in the stone houses, but that there was occupation of brush huts, which could have been surviving Sinaguas who lived with present-day Yavapais. Throughout the Sinagua occupation of the stone houses, Yavapais had lived nearby all along. The Yavapai told the Spaniards that long ago other people came there and then went south.

Meanwhile, other tribes moved slowly in. Today's Yavapai-Apache tribe places itself in the Verde Valley as early as the 16th century.

Part 2 History

Long after Antonio de Espejo visited the Verde Valley, other white men entered searching for beaver and gold. In the early 1800's, farmers came by way of Prescott and settled about 200 acres of farmland on Clear Creek, a former Hohokam and Sinagua farming center. There were Apaches around, but they were no real threat until, due to hunger, they incurred the wrath of the settlers by raiding corn patches and stealing farm animals.

There was a great demand that soldiers be brought in to "protect" the settlers. An army camp, later called Fort Verde, was set up in the south end of the middle Verde Valley, and cavalry and infantry were brought in to move the Apaches onto a reservation. As this was going on, a new commander arrived at the fort and ordered that the Apaches be sent 150 miles southeast to San Carlos, an Apache reservation. This was the forced march in the snowy winter of 1875 that is now re-enacted each year by the present Apaches in the Verde Valley.

On May 26, 1864, an expedition was sent from the army camp on a three-day tour of the country to the north. In the files at Sharlott Hall in Prescott are copies of ARIZONA MINER, a Prescott weekly paper. An article by a Henry Clifton states in part, "We came to a hole with a pool in it which was actually a spring. There were cliffs around three sides of the 450-foot wide pool. In the cliffs were natural openings or hollowed out places that had been walled up." Assuming the place had been occupied by Aztecs, the soldiers named it MONTEZUMA WELL.

This probably came about because some of the soldiers had fought under General Zachary Taylor (who later became President of the United States), when Taylor, with 47,000 troops, chased General Santa Ana clear to Mexico City after the Alamo massacre. Many of these soldiers were Texans, and, since Texas had been under Spanish rule for 200 years, could not only speak the language, but were also familiar with the history of the Aztecs, and Montezuma 11, their emperor.

In 1875 a Lieutenant Carter, stationed at Fort Verde, took pictures (now in the Federal Archives) of several people picnicking at

Montezuma Well. Corporal Wales Arnold and his wife Sarah were among them. Corporal Arnold was a Volunteer, born in Braintree, Norfolk County, Massachusetts, in April of 1837, the son of George Washington and Sarah Ann (Wales) Arnold. He married Jennie Sarah Wells, a cook on the Bowers's Aqua Fria Ranch, on October 24, 1869.

In 1870 Wales Arnold filed for water rights on Beaver Creek, and, putting in a mile of ditch, farmed 20 acres on what was later called the West Montezuma Well ranch. An 1878 HANDBOOK TO ARIZONA by H. Hinton, locates Montezuma Well some two miles east of Mr. Arnold's farm (hereafter referred to as East Montezuma Well Ranch). Wales also built an adobe house with gun portholes and an inside well, which was located in the pasture area of the present-day Hobby Horse Ranch. A partner, Joseph Burroughs, who helped Wales build the house, was killed by Indians on the bluff south of the present Montezuma Well picnic grounds.

In 1875 wagon trains stopped at the Well ranch; and, at one time during a so-called "Indian uprising", the nearby settlers sought refuge there for two weeks.

Sometime later, a Lieutenant Somerby of the 8th U.S. Cavalry found a little Indian girl, about three years of age, in a cave after an Indian fight. Wales and Sarah, who were childless, took her in. At first they had to keep her in a crate because she was wild, given to biting and spitting, which has been likened to keeping a "pet coon in a box".

Wales and Sarah raised the child as their own, naming her Lulu, or, according to some sources, Lula. When grown, Lulu married Abraham Lincoln McKesson. ("A.L. McKesson" is chiseled above the black rock down by the Well Outlet on Beaver Creek.) Lulu bore six children. One of them, Isabelle, a resident of San Jacinto, California for 58 years, spoke of her mother as a full-blooded Apache Indian named Lula Verde. Lulu died of consumption in Kingman, Arizona, in 1897.

In 1880, shortly after acquiring Lulu, Wales and Sarah moved from the Well area to Arnold Canyon near Squaw Peak, where they built a rock house with rifle portholes and an outside well. This house still stands, and was observed by the writer and a Park Ranger in June of 1989. The width of the walls measured the entire length of a man's arm, and were built square and true. Two fruit trees, a plum and a pear, are still thriving, and were loaded with green fruit.

According to Bob Bates, who lives in Cornville, the long claw marks that riddle the trunk of the pear tree were made by bears seeking fruit. Bob didn't mention bears eating the plums, but it is said that they are so sour they would make a pig squeal.

The adobe house that Wales and his partner built earlier is no longer in existence.

In 1890, the Arnolds' moved once again, this time back to the Verde Valley where Mrs. Arnold rented and operated W.S. "Boss" Head's boarding house, serving as its cook, while Wales hauled water by wagon and team.

The Arnolds' are buried at Clear Creek Cemetery near Camp Verde. Wales's gravestone reads:

CORPL. WALES ARNOLD
1 CAL. INF.

Sarah's stone, much larger and the tallest in the cemetery, reads:

SARAH J. ARNOLD
WIFE OF WALES ARNOLD
1846- 1909
OLDEST WOMAN SETTLER IN VERDE VALLEY

and, in much larger letters, because everyone in the Valley called her "Auntie", a block reading:

AUNTIE ARNOLD

The soldiers from Fort Verde often picnicked at the Well, and were naturally curious about it. In 1880 a Captain Day and friends from Fort Verde decided to measure the depth of the Well pool. They took all the rope they could find in camp, and improvised a raft. Poling the raft to the middle of the pool, they tied a rock with rope, and, hoping the rope was long enough, dropped it into the water. They hit bottom at 65 feet, with plenty of rope left. To keep the soldiers back at camp from laughing at him for hauling all that rope, the Captain wet the rest and returned to camp saying, "It's bottomless."

In 1878, George Rothrock, a photographer from Phoenix, came by the Well and left his ad, printed in black paint on the cave wall

inside the Well: "Photos by Rothrock, Phoenix". Since there were no spray cans in those days, wagon paint was probably used.

George Rothrock opened a studio in Phoenix and took pictures (which are preserved in the Hayden Library in Phoenix) all over Arizona. Among them: Apaches on the San Carlos reservation, the first church in Phoenix, an Indian style ramada covered with cottonwood branches, every town he visited in his travels, and, of course, Montezuma Well.

Rothrock built the first wood house in Phoenix, 10' X 12', on Adams between 1st and Central. He helped incorporate the town, was a councilman, and served as Justice of the Peace. (On November 22, 1974, June Shill, a resident of Rimrock, was at the Well with a group of Beaver Creek school children. She stated that it was her husband's great-grandfather, a photographer in Phoenix, who had made the writing on the wall in the cave area, and "Rothrock took pictures of the Well in 1878.")

Continuing the progression of the ownership of West Montezuma Well Ranch, the following information obtained from the Deeds file in Yavapai County Court records: "Arnold, Wales, to Hornbeck, Robert, March 2, 1880. Transferred West half of Montezuma Well property. Hornbeck, Robert, to Pleasants, Robert, and Wingfield, W.G., September 19, 1881. Transferred West half of Montezuma Well property. Wingfield, W. G. and wife to Sherman, M.H., and Mehrens, H., January 23, 1883. Transferred West half of Montezuma Well property. Sherman, Moses, H., and wife, to Back, W.B., September 21, 1897. West half became part of Montezuma Well property. The water rights to Wales Arnold's ditch from Beaver Creek was passed along through each deed." (See file 660-05.7, May 24, 1847. A. H. Schroeder.)

Before Montezuma Well became a Park Service National Monument in 1947, the West property was sold once again by W. B. Back to Charles R. Chestnut, in 1912. The name W.B. Back is further explained in the next transition of property rights to East Montezuma Well Ranch, which is where Montezuma Well is actually located.

There was a ranch upstream from Montezuma Well called Soda Springs, where Samuel Shull camped as a squatter. A Mr. Robert Finnie, who had 320 acres at 7-Anchor Spring, came down Beaver Creek looking for more land. He met Sam Shull, who said, "Come with me and I'll show you around." Mr. Finnie didn't like the "Well"

land or anything else he saw. He asked Sam if he would sell him his squatter's rights on Soda Springs.

Sam Shull did just that (1883) for two horses, went to the Well, took squatter's rights and built a shack. Meanwhile, Mr. Finnie homesteaded the Springs and didn't get his deed until 1907. It was signed by President Theodore Roosevelt. (W.B. Back got his deed the same year, also signed by Roosevelt.) Soda Springs Ranch later became a famous dude ranch.

After living on the Well for several years, Sam Shull traded the Well property to Abraham Lincoln Smith for \$40, a pair of chaps and a horse. (Abraham Lincoln Smith had a twin brother named Ulysses Grant Smith. They were born in Humansville, Polk County, Missouri, in 1864.)

In 1887, Mr. William Beriman Back moved nearby and raised cattle on his Beaver Creek ranch. In 1888, "Link" Smith traded the Well to Back for two horses.

Al Schroeder, National Parks archeologist and the first Park Ranger at the Well, took a picture of 83-year old "Link" in 1947, and they discussed the two trades. "Link" verified them- one horse to Sam Shull and two from Bill Back, and said, "I doubled my money." The story was also confirmed by Ella Smith Heydorn and Nellie Smith Hartborn, daughters of Link, in a conversation with this writer at Montezuma Well in 1984. When Ulysses, called Grant, was 23 years old he was killed by a bucking horse named "Lightning".

William Beriman Back was born in Harrisonville, Cass County, Missouri, in 1858. According to his great-grandniece, Helen Keckler, who lives in Jamul, California, some years after settling in the Verde Valley, Bill went back to Missouri on a visit and saw his family again. When he told them of the hardships and Indian attacks he had endured, they asked, "Bill, when you were facing all of those dangers, didn't you think of your family and how worried we would be?" Bill answered, "Yep, and I just crossed another hill."

Mrs. Keckler also recalls the "Antelope Story". At the time of the Indian wars, the ranch had been attacked. When Bill was asked how he had escaped, he said, "Well, do you know how the rear end of an antelope is white? I just tied a pillow to my rear-end, got down on my hands with my rear end in the air and went for the brush. The Indians thought I was an antelope and left me alone!" Mrs. Keckler adds her own comment: "What if those Indians had been hungry? That pillow would have been turned into a pin cushion!"

Bill Back married Margie Ann Dickinson at Beaver Creek in 1878. They had seven children. Mildred was the oldest, then came Fred, Bertha, Harry, twins Jessie and Jennie, and William. Clyde Dickinson, a grandnephew, told this writer that when the twins were born Mildred packed her bag and started down the road. Her dad, Bill, called out, "Where you goin', Millie?"

Millie said, "I don't mind helping with the kids but when you start bringing them on two at a time I'm leaving."

According to a grandchild, the late Helen Deuel, in about 1882, Baptist church services were held every Sunday under a huge cottonwood tree about eight miles west of the Well, and Margie Ann Back attended. This was before she and Bill traded the horses for their farm there.

When Bill traded for the Well property, neighbors thought he got a bad deal because the land was wild, covered with cat's-claw and mesquite.

Bill cut it all down, thereby securing firewood for the next several years. He filed on the Well water rights, used a portion of the Indian ditch from the Well outlet, and ran a new ditch on down to the present pasture and picnic grounds area. He raised sheep, cattle, and a few horses. He built a blacksmith shop in an old Sinagua cave back of his house, and used another cave for a pigpen, walling it up with material left by the former occupants.

Bill built a large smokehouse of alder logs, and the children had to tend the fire by day while he tended it by night. He sold hay and grain to settlers. He ran water from Beaver Creek (mixing it with Well water to cut down the lime content) over to a sort of "island" in the Beaver wash, on which he raised watermelons and cantaloupes. To pick up extra cash, he rented the island to a Mr. Gardner, who continued to raise the melons.

Bill freighted produce, melons, corn, fruit, ham and bacon to Flagstaff where he sold it to lumber camps and railroad workers. In those days, the farmers of the valley heading for Flagstaff would gather at the foot of Schnebly Hill and double up their teams to pull each wagon up the steepest part.

Bill also worked on the road that was being built through his place up to Stoneman Lake, and later was in charge of maintenance of the road. Mr. Gardner told of Bill's habit of rolling rocks off the road with his horse's lead rope snapped to his belt. David Hopkins of

Camp Verde, Gardner's brother-in-law, speculated with this writer that if the horse had ever bolted, Bill might have lost his pants.

Before tractors and trucks, Clydesdale horses were used in Flagstaff for hauling logs in the lumber camps. When one lumber camp shut down for the winter, the enterprising Bill Back boarded the horses, sometimes as many as 24. It was a good deal as Bill had hay to sell, and, instead of having to haul it, he simply pitched it out to his Clydesdale boarders.

(In 1931-32 there was a lot of snow, and a herd of 54 bulls up in Beaver Canyon were starving. The cowboys moved them down to the Well Ranch and "young" Bill Back boarded them until April. Once again, hay did not have to be hauled.)

In winter, Bill boarded Grand Canyon pack mules. When a man named Doyle rented horses and stagecoach teams to the movie people who made westerns in the Verde Valley, Bill boarded Doyle's animals when they weren't engaged in movies.

One summer when he needed cash money, Bill Back, family and all, went to Flagstaff to work. He left relatives, or possibly renters, to watch the Well. They didn't keep the outlet free of leaves and debris, and when Bill got back the water had risen over four feet. Even after cleaning it out, the ditch ran over for several days. (Gail Back, Bill Back's grandson of Claypool, Arizona, says that to clean the Well irrigation ditch they dragged a mesquite log down it lengthwise behind a team of horses.)

In 1895 Bill hauled lumber from Flagstaff and built a ten-room house. (The house burned down in 1931, two years after Bill's death.) He set up a campground and picnic grounds, and people began coming up from Phoenix in summer to get out of the heat. In later years, "young" Bill built a two-space auto court.

One time, when Bill had gone for supplies, leaving Margie Ann and the children at home, about a dozen Indians came into the house just as they were eating breakfast. Margie Ann remained calm, and the children sat wide-eyed while the Indians took all the food from the table and kitchen, and as much grain and corn as they could carry.

Marion Ried, a nephew of Bill, tells another Indian story that happened when he was seven years old. He was with his Aunt Margie and Uncle Bill when an Indian came to the door. He had rabbits, lizards and squirrels tied to his belt, was carrying his bow and arrows as well as a good-sized hunting knife, and his arms were covered with blood. When Marion saw him, he started bawling. The

Indian said, "Papoose unhappy." It turned out all he wanted was to use the grinding stone in the yard.

Mrs. Keckler recounts a more humorous encounter for the Back children, which happened when they were all in their teens. Bill and Margie Ann had invited the preacher home for dinner one Sunday after church. Bill was driving the wagon with the boys riding in back next to the driver's seat, and the girls sitting next to the tailgate. The preacher had pulled his horse to the back of Bill's wagon and was leaning over his saddlehorn talking to the girls. Coming to a deep dip in the road, Bill started his team into a trot, then suddenly hauled up on the reins causing the wagon to stop abruptly. The preacher didn't stop! He upended pretty as you please and somersaulted right into the laps of the girls, accompanied by uproarious laughter from Bill and his sons. Margie Ann didn't laugh! In fact, she never let Bill hear the last of it, nor failed to bawl him out when he told the story accompanied by gales of laughter.

Ever resourceful, Bill rented a small house down near the picnic grounds to a family who farmed the land to the south. They were irrigating at night when a tragedy occurred. They had sent their 9-year old daughter, Alma, back to the house to fill the lanterns. Somehow, in the process, she spilled kerosene and died in the burning house.

As visitors to the Well increased, Bill kept a rowboat on the Well pond and took passengers out for 25 cents a ride. The late Virgil Bice of Rimrock told this writer that Eulalia May Boren, who wrote "Ranch School Teacher", told him she learned to swim from the back of that boat.

Bill's children, nieces, nephews and cousins loved to show visitors around the Well. They sold pieces of painted pottery and arrowheads. According to Helen Deuel, she and the girls would leave old horseshoes in the ditch until they were coated with a heavy coat of lime and then sell them to tourists as "petrified horseshoes".

Some of the early visitors to the Well were also guests from the Beaver Creek, Soda Springs and Rimrock dude ranches, whose going rate for food and lodging was about fifty dollars a week, including horses, equipment and guide service. Two of the ranches were within a mile of the Backs' Montezuma Well ranch, which advertised it and its Indian ruins as Verde Valley attractions.

Transporting guests to the dude ranches was a problem. The bumpy dirt roads, either muddy or dusty according to the weather,

were torture for people used to the modern conveniences of cities such as New York and Hollywood, so in 1928 a dirt strip called Rimrock Airport (still in use today) began operation.

A Post Office was established at the old Fredricks' place on Soda Springs Ranch, and was operational until the late sixties. During high water, the Back family and the people from the dude ranches had to cross the creek on a foot bridge at Red Tank Draw. The cables that supported the bridge are still suspended in their original position to this day.

Bill suffered from bad arthritis in his knees, and tried many remedies to no avail. He had an Indian friend bring him a mess of wild bees and tried the "bee-sting" cure on his poor knees. A cooked up poultice of leaves from a Creosote bush didn't help a lot, either. He even made a trip to Missouri and tried some hot springs there for a "cure".

But arthritis didn't keep Bill from anything pertaining to his ranch. Virgil Bice remembers working as a teenager on Jimmy Van Deren's adjoining farm when there was a difference with cattlemen over Bill Back's cattle. Bill rode down with his rifle and they all talked it over. There was a peaceful settlement.

Back in the cave on the Well level there is a long low room with a small lake or pond. The Back children called it "Montezuma's Bathtub". The late Jesse Reeves told this writer that he and "Young" Bill Back's son Carl went through the tube at the end of the room and came out the opening (Outlet) near the big sycamore where the water flows today. Jesse said another kid with them didn't want to go, but he and Carl made it. Some of the grandchildren say it isn't so. It would be a tight squeeze, but Bill Sullivan and Will Jordan said they had gone through there, too. When grown-ups aren't around, kids can think of interesting things to do. As mothers sometimes say, "One boy is all boy, two boys are half a boy and three boys are no boy at all."

In 1927 bubbles began rising to the surface of the water just below the cliff dwellings, and the boat tours were suspended for a while as there was fear the bubbles were caused by some kind of volcanic eruption. (Park Service Archeologist Al Schroeder recalls a similar disturbance in 1947. In 1987, the bubbles appeared once more, causing the Well water to turn "milky" for about two weeks. Dr. Dean Blinn, Department of Biological Sciences, NAU, found the substance to be lime and fine sediment. This strange phenomenon

causes visitors today to wonder what the ancient Indians would have thought of such occurrences.)

Bill Back stocked the pool with blue gill and catfish, hoping it would make a good fishing hole. Unfortunately, because of a high concentration of carbon dioxide from dissolved limestone calcium carbonate in the water, fish do not survive in the pool. Carbon dioxide goes through the gills and into the blood stream of fish, causing muscle paralysis and death.

As the water progresses down the ditch, the carbon dioxide is aerated out. (A rancher today who lives a mile and a half from the Well has a fish pond filled with ditch water. Some of his fish come up the ditch as far as the picnic grounds.)

"Young" Bill Back told Al Schroeder that around the time he was born there were many alder, sycamore, cottonwood, walnut and ash trees inside the Well, but a fire took most of them out about 1901. On the northeast side of the pool, trunks and limbs can still be seen in the shallower parts.

Margie Ann Back died in 1927, and Bill in 1929. They had sold off half the water rights and all but 100 acres of the land before they died. The children who were left tried to run the place, but, since it was in an estate, finally advertised it for sale.

"Young Bill" lived there with his wife, May, from 1930 to 1940. In 1932 he erected a stone building at the road entrance to the Well area and started a museum. Admission to see both the museum and the Well was fifty cents. (Gail Back, son of young Bill and May, said recently, "They had over 100 pots in the Museum, and a necklace was found with 1700 beads on it.") Young Bill also continued the boat rides and the picnic and camping grounds.

Young Bill dug up some of the Indian graves. In one grave he found five men and one woman, having been told by a visiting doctor how to distinguish male and female skeletons. The bones were green and it was thought that copper had been used as a preservative. Indian people buried babies in their houses or close by so they would be close to their mothers. Young Bill exhumed 17 baby graves.

He also found a great deal of pottery. A skeleton was found on a shelf in the big cave down by the Well pool. Bill didn't think it was an Indian skeleton as there were no artifacts, and, upon finding a celluloid collar, decided it was the remains of a white man.

About this time a rectangular green building was moved onto the property. It was used as a school, grades five through eight, for

half of one year. Margaret Hallett was the teacher. (Margaret still lives in Camp Verde, and in 1989 the Hallett Plaza in the center of town was erected in her honor.)

A frame building, called the Beaver Creek School, was erected later, east and under the hill below the Rimrock Ranch. Ruth Wolfe Jordan taught there in 1923-1924, and lived at Soda Springs Ranch. She used to ride her "Pet horse" to the school every day. She changed from her leather riding skirt to a regular skirt, and at the end of each day changed back into the riding skirt for the trip home.

Ruth taught, among others, Virgil Bice, Zeke Taylor and an Apache boy from the Indian reservation in Rimrock. One day the Indian boy brought her a nice Indian pot. Another day, Zeke Taylor had some kitchen matches in his pocket and while he was fooling with them, they caught fire. Zeke, and everybody else, were pretty busy for a while.

In a letter to this writer, Ruth remembered "the big strong horse that Mr. Back kept saddled and tied near the house so he could immediately get on it and ride to the Well if visitors came to look at it. I also remember how quickly he got to the school house one morning when I sent for help. It was very cold and we put our seats around the stove, trying to keep warm. The stove pipe just went up through the roof, and got so hot it started a fire. There were two horses at school so I sent one rider for Mr. Back and the other rider in the opposite direction. It was such a relief to see Mr. Back coming on his big horse."

However, most of the action was over. Since there was no ceiling, Ruth's oldest student, about 15, had worked his way to the flame across the rafters with a bucket and what little water they had. The boy asked Ruth to toss him a pint drinking cup, and "this boy sat up there and saved the school house from burning down by tossing less than a pint of water at a time on a flame that was already starting in on the top of the roof. I was glad one family in the district sent this boy \$10 for saving the school house."

Once when Ruth took her class over to the Well, Bill Back showed them around much as the rangers do today. He always stayed on his horse on these occasions as his arthritic knees bothered him when mounting and dismounting. Ruth stopped often at the Back ranch for a visit on her way home from school, where she had many a slice of buttered bread fresh from the oven.

Zeke Taylor was from the Taylor Ranch, B Bar D. He used to go by Bill Back's place on his way to and from school, and would shoot rocks at Bill's sign with his slingshot. Old Bill told him, "I've got a real good innertube you can have if you'll stop shooting my sign. You can make a world of slingshots with the rubber." Zeke took the tube. (Zeke Taylor wrote a good book about the early cattle-ranching days titled Reflections of the Past as it Rolled Along.)

In January of 1933, a large portion of the rock wall surrounding the Well broke off and fell onto a ruin and a cave. The rock is still there today, near the trail that leads down to Well level. Paul Webb, from Soda Springs Ranch, was riding his horse on the north side of the Well when the huge rock fell. He heard the crash, and, riding to the edge of the Well, saw dust rising from the fall.

(According to Ella May Smith Hart, daughter of Abraham Lincoln Smith, who today lives in Cottonwood, the cave that was buried by the rock had been explored at one time by her father and his brother, Ulysses Grant Smith. They had torches, and were progressing very well until they saw a large rattlesnake, which ended their expedition forthwith.)

In 1946, the Department of Interior began negotiations to buy the Well. Park Service Ranger Al Schroeder made the searches for boundaries, land titles and water rights, and the deal went through in April, 1947. Al moved onto the place, fixing up the house that had been built after the fire, and became its first ranger. The old rock museum was used as a contact station, and Montezuma Well National Monument was opened to visitors.

Al Schroeder continued to irrigate the pasture, and had the hay mowed and baled. On August 26, Mr. Egermayer, the custodian from Saguaro National Monument where horses were still used for patrolling, came to the Well and got a truckload of hay for their horses. On August 30, Don Fulton came and got a second load.

Al Schroeder listed a Chronicle of events for the year 1948. In January, an article was written on Montezuma Well and published in PLATEAU, a Museum of Northern Arizona publication; and an outhouse, old farm wagons and equipment were dismantled and carried away. In February the cataloguing of specimens was finished. March saw the house that had been built after the fire, and the museum, repaired by a contractor; and the beginning of a collection of plants for an herbarium. Al painted the interior of the house in April, and took up residence at Montezuma Well on the 29th. In May a pay

phone with house extension was installed by Mountain States Tel and Tel; and a diver went down into the Well, sponsored by the Museum of Northern Arizona.

Al was busy in June. He built and set up a register stand, and constructed a Museum exhibit and storage space. On June 19, the flow of the Well was measured by U.S. Department of Interior, United States Geological Survey, Water Resources branch, Flagstaff, Arizona, by A.G. Hely: 1,500,000 gallons per day.

Al was busier than ever in November when he insulated attic quarters, built a pump shed, completed an oil rack for a gravity feed system, painted the exterior of quarters, and made and installed doors for a car stall between cabins. In December exhibits (temporary) for 3 panels of bird records (130 species) were completed.

Young Bill and May Back wanted to give their collection of pottery to Park Service, but, since the other children had decided to keep theirs, sold it instead to a lady in Camp Verde. A granddaughter of the purchaser (who lives in Camp Verde) now has the collection, as well as the cancelled check given to May Back.

In records kept at Montezuma Well there is the following account: "On 6/20/60 one W.K. Duffy of California came into the Castle office announcing that he had something to show the staff. 'Poking around' at the Well he had discovered two infant burials wrapped in cotton cloth. These came from a cave shelter on the NE side of the Well and NW bank of Beaver Creek. The shelter is 8 ft. deep and 9 ft. long, with portions of wall on the outside standing about 2 ft. high. The shelter is part of a large cliff pueblo, which was probably three stories high.

"As Mr. Duffy seemed wholly ignorant of the fact that he was violating a law when he removed these burials, and as he did turn them into the Monument staff, there was no prosecution of the Antiquities Act violation.

"One interesting note is that the skulls of both infants were crushed, and by their size it was estimated that they died at birth. It is possible they were killed in accordance with a superstition against multiple births held by many Southwestern Indians."

The Hohokam and Sinaqua Indians are credited with leaving petroglyphs in Walker, Beaver, and Red Tank canyons. Some have been identified by Hopi visitors to the Well as clan symbols. Surely in

of all that handiwork, called Indian Art by some, there was a definite purpose and message to it all.

Part Three

Montezuma Well Today

Tourists who come to the Well today often ask why it is called Montezuma Well. Actually, the name is a complete misnomer. Montezuma never left what is now known as Mexico City; and the Well is a spring rather than a well. Today's rangers are often heard to say, "Montezuma never slept here."

During the course of an ordinary day, this writer, as a Volunteer in Parks (VIP) for twenty years, may talk to people from as near as Rimrock or as far away as Japan. Indians, both Navaho and Hopi, are frequent visitors from the reservations up north, as are local Yavapai-Apaches.

To many Indians, the water of Montezuma Well is very sacred. The Hopi, Antelope and Snake Clan get water from the Well in late summer for their rain ceremonies. Members of other tribes come there often. The Hopi people come to pray, leave prayer feathers, sprinkle sacred cornmeal and take water back to the reservation for ceremonies. In contrast to other tribes, the Hopi take their water from the Well pool itself. The water has been used many times at the Rain Dances on 2nd Mesa in the Hopi reservation. After a dance in July, 1988, it rained within four days.

Sometimes tribal members go down to the Outlet by Beaver Creek and throw Well water over their shoulders to the north, explaining, "Home is in that direction and we want rain." A ranger once asked if they would throw some "straight up, as we are in a drought, too". They did.

There is a legend of the Butterfly Clan that has been retold many times by Hopi visitors to the Well, and is paraphrased here: "They had a religious gathering, and one of the priests went into a trance, did a strange dance, and turned into a serpent. Because this was a disturbing thing, they migrated." Through contact with the writer over the years, fourteen clans have identified with this migration: Butterfly, Sand, Water, Rabbit, Badger, Bear, Bear Strap, Snake, Antelope, Corn, Tobacco, Flute, Fire and Sun. The Well is sacred to these people because they believe that their ancestors were a part of that migration.

There are other Hopi clans who say that their ancestral homes were in Betatakin, Mesa Verde and Grand Canyon, rather than the Well.

Of interest to many tourists is a visit Al Schroeder (the first ranger at Montezuma Well) made to some Hopi priests at Walpi on August 20, 1949. He showed them sketches of the Well ruins. The priests seemed to have legendary knowledge of a place somewhat like it where they said the Great Plumed Snake had one of his numerous homes. Al wrote, "They reminded me of a legend that had formerly been related to me of how the Snake arose from a great cavity or depression in the ground, and how, they had heard, water boiled out of that hole into a neighboring river. The Hopi have personal knowledge of the Well, for many of their number have visited Verde Valley, and they claim the ruins there as the home of their ancestors. It would not be strange, therefore, if this marvelous crater was regarded by them as a house of Paluluken, their mythic Plumed Serpent."

Navajo people come often to the Well for water. One jug was filled for use in a wedding ceremony, another by an old woman with bad legs. When asked what she was going to use the water for, she answered, "I will rub some on my legs."

On a Saturday morning in the spring of 1973, three Yavapai-Apaches came to the Well Overlook with two plastic jugs. They said they came for water, and would have to say a prayer. While at the Overlook, the older man pointed down into the Well and said, "There used to be a pueblo down there, 8000 years ago, before Noah's time." They filled their jugs at the Beaver Creek outlet by putting them up as far as possible into the hole in the rock, nearly out of sight. They said they were from Windy Point, near Camp Verde.

One Apache legend still repeated today: Montezuma Well flooded the world and only one person was left, a girl, Widapokwi. She floated in a canoe until she came to a cave where she decided to live. She had a daughter whose father was the Sun. The daughter produced a son. This was the beginning of the Apache people.

Another Apache legend states that in the early days of the Yavapai-Apache occupation of the Verde Valley, two women went out gathering food plants near the Well. They didn't come home, so the next day a search was made. The burden baskets were found at the edge of the Well, but the women were never seen again. In a talk with Agnes Curtis, a member of the tribe and a basketmaker who often

demonstrates her work at the Yavapai Apache Visitors Center in Camp Verde, she said, "One of those women was my great-great-great-grandmother."

In 1974, a young Hopi woman with two small boys came to the Well. The boys ran down the trail towards the big cave. The writer offered to walk down with the mother, but she preferred to stay at the overlook, because, "Something bad happened down there last time I was here." She added that her father leaves a prayer feather in the cave every time he visits the Well.

In the same year, a Laguna pueblo woman said, "My brother-in-law who lives in California leaves a prayer feather at the Well every time he travels through this part of the country on his way to our pueblo to hunt." She said she learned about the Well, and Sacred Mountain off to the east, from her father-in-law.

In 1984, a Hopi couple came to the Well. After the husband had prayed by the side of the pool, he said that he had gone to school at Sherman Institute in Riverside, California. After graduating, he went to work at the Los Angeles stockyards, then moved to Tucson where he worked for the city for 27 years. This was his first visit to the Well, and, at least in this writer's eyes, was definitely a pilgrimage. He said that he was a priest in the Badger Clan at 3rd Mesa. When shown a copy of the petroglyph scratched on the wall of one of the rooms in Montezuma Castle, a maze-like figure with continuous lines and a cross in the center, he said, "We leave that sign behind when we depart," indicating that it was a migration symbol. The symbol is for sale along with other transparencies at the Tourist Center in Montezuma Castle.

Various interpretations of this symbol have been related: it denotes the beginning of life; it is feminine; and it is shown to pregnant women.

Visitors to the Well, upon hearing that the Hopi, Navajo and Apache all get their water from different locations at the Well, often ask, "Why?" When the writer brought this to the attention of a Hopi visitor, his response was, "How many churches do you have in Sedona?"

"Oh, 22 or 25."

"Which one do you go to?"

"I go to the Congregational."

The Hopi replied, "Why?"

The point seemed well taken.

A Navajo, visiting a sixth grade class one day, asked, "How many of you know what year Columbus set out for the West Indies?" Not many children knew the answer.

The Navajo told them, "I'm glad Columbus wasn't setting out for Turkey."

The children laughed at the thought that the Indians today might have been called Turkeys.

The Navajo also told the children that when Columbus landed on Watling Island in the Bahamas on October 12, 1492, there were 12,000,000 people living north of the Rio Grande, made up of 400 different cultures and speaking 500 different languages. They thought of the Europeans as just another culture or tribe. Little did they know that almost six centuries later their number would have been reduced to 1,400,000.

The Well area abounds in wildlife. There are javelinas, skunks, muskrats, turtles, racoons, ringtail cats, beavers, mountain lions, rattlesnakes and deer. A fox raises her family every year in one of the caves. A Great Horned Owl can also be spotted annually with her young in one of the small caves. Egrets have been known to stop by, and a pair of blue herons often fly over the Well and land by the pool. The local people call them George and Georgette.

From November to April, 40 to 50 ducks migrate to the Well. Among them are Cinnamon Teal, Ring-Necked, Widgeon, Gadwall and Shoveler. Canada Geese have been seen from time to time. When the ducks and geese fly north, it is said that no one stays at the Well except rangers, visitors, muskrats and turtles.

The turtles are a big attraction. Children love to spot them surfacing from the pond-weed to sun themselves on logs or rocks. The large turtles are "dime-store", or pet shop, turtles that were brought to the Well about 35 years ago. These turtles were the subject of the writer's first meeting with Dr. Gerald Cole. A man and woman were standing at the overlook watching the turtles. The writer observed, "According to Dr. Jerry Cole, those are dime-store turtles." The woman turned to him and said, "Ranger Beckman, meet my husband, Dr. Jerry Cole." It was the beginning of a treasured relationship.

As a scientist from ASU in the early 60's, Jerry began studying the plant and animal life in the Well water. He spent many days out on the pond in a rather leaky raft. One amphipod is not found anywhere else in the world. One day when Jerry was coming to shore

we asked him if he'd found any "Bug-us-Rare-us". He answered, "No. Bug-us Only-est."

Finding a small round tube in his Post Office box one morning, the writer opened it to find a plastic sack filled with very fine sand. Unfolding a small note, he read, "Squeaky stuff from the Well." It was from Jerry, and, sure enough, when damp and rubbed between the fingers, it squeaked, much as feet squeak on beach sand.

Jerry retired several years ago, and we now have a new biological scientist, Dr. Dean Blinn. Over a period of years, Dean has been rafting with students out on the pond, sometimes spending most of the night. Rangers tell visitors, "He babysits those amphipods."

One evening, one of our local fliers, Burt Brown, saw a car in the Well parking lot and someone out in a boat on the pond. Since it was after hours and the gate locked, he reported it. The writer told him that Dean has his own key, and his amphipods are making the Well famous. We are sure glad that Burt, our flier and friend, watches over the place.

Over the years, there have been diving teams at the Well. A dig was made in the bottom near the big pueblo by a park archeologist and his team. They found lots of broken pots, cooked bones and turtle shells, as well as broken hand tools. The objects were all buried in silt and mud, having been thrown from the rooms on the rim. Like many people today, the ancient Indians obviously did not worry too much about pollution.

According to Well records, on March 7th, 1954, F.N. Holmquist, his son J.B. Holmquist, and L.D. Dadisman, all of Phoenix, carried diving equipment into the Well and made two dives to the bottom before being apprehended. Dadisman and J.B. Holmquist, members of an aqualung underwater sports group called Desert Divers went out on the surface of the Well in a rubber boat, and Holmquist, equipped with a single- tank aqualung device, made the dives to the bottom.

One dive was down the northwest slope of the Well, which he reported was well covered with vegetation most of the way. The second dive took place in the center of the pond. Holmquist reported passing through layers of millions of leeches; he attempted to place one of them inside his swim suit for examination at the surface but it "bit" him and he promptly discarded it. (Writer's note: the leech probably only used sucker to attack- they don't have teeth!) He carried with him a wrist pressure measurement device and reported

that on the uneven floor of the bottom he recorded two measurements: 60 ft. and 65 ft. Even though the day was clear, Holmquist said that there was very little light on the bottom and that he had to hold the pressure-measuring device very close to his face in order to read it.

The diver and his companions were advised that diving in Montezuma Well was prohibited because of its adverse effect on wildlife.

On March 9, 1974, with permission, a dive was made by a group of ASU students led by Mark Cagle of Ukiah, California. Mark recorded in his log, "I was almost sucked into a fissure." Also, "I saw a pile of bones, but was unable to secure any." The divers found "hot spots" on the bottom, one registering 82 degrees.

The horned pond weed (*Potamogeton*) growing in the Well will not grow in water deeper than 22 feet. The weed outline around the edge of the pond denotes a 22-foot contour. The pond weed is the food chain that supports the duck, muskrat and turtle population. An amphipod living in the pond is not found anywhere else in the world. Both the leeches, and water scorpions in the vegetation, that eat the amphipod are also "one of a kind".

We get many questions about snakes. Yes, we have snakes, not a great many, but more than enough for the tourists. We remove rattlesnakes when we see them, or one is reported by a tourist- if we can catch them! Our long "clamp catcher" is harmless, and we put the rattlers in a special lidded bucket, marked SNAKE. We haul them in the government truck a few miles north and dump them out, talking to them and encouraging them to look for friends and enjoy their new home.

Deer move through the Monument often and are seen in the picnic grounds and pasture. Many mountain lion tracks have been found in the soft mud along Beaver Creek. In 1990 a young lion was spotted on the Beaver near the end of the pasture.

Several years ago a small black bear was scared out of the brush on Beaver Creek near the Lake Montezuma golf course. It is speculated that he was attracted to the area by unfinished food in people's pet dishes, and was sleeping off an "Alpo fix". He ran across the golf course towards Russell Canyon, scattering the golfers like a mad woman's kids.

The rock steps leading down to the cave number 104, "and 208 back". In hot weather, at about 100 degrees, it is "312 steps back." Try it.

At the large cave at the bottom of the steps there is a fence with a sign telling visitors not to enter. Beyond the railing, footprints can usually be found. As our visitors are very careful and do not go beyond posted limits, it has to be assumed that those tracks were made by Tom Sawyer, Becky Thatcher and Indian Joe. They are wearing Reeboks now. The "dangerous gases" sign refers to the concentration of carbon dioxide in the cave.

People ask every day- we are open 365 days of the year- "Can you drink the water?" (The writer has been drinking from the ditch for over twenty years, and the only thing he has noticed is that the rangers are getting younger and his hair is getting thinner). But in answer to the question, people are cautioned not to drink the water. If they get sick, the writer is "too old to be sued, and the rangers don't have enough take-home pay." Also, "People drink the water every day but we never see them again." Kind of bum ranger jokes.

In the early days, Bill Back ("old" Bill) kept an enamel cup for all visitors who wanted a drink of ditch water. It hung from a nail driven into the big sycamore at the outlet.

May Back, "young" Bill's widow, is called Aunt May by most of the old timers. At a Pioneer Picnic, Aunt May told the writer that she had a headache, took an aspirin from her purse, and, dipping a paper cup into the ditch water, promptly downed the aspirin.

People often ask about edible plants. "Mormon Tea" (longleaf ephedra) is the most well known. Indians rolled the dried stems into neat little bundles, just right for dropping into a pot of boiling water. People still make the tea today, and for what it's worth, a doctor friend told this writer "it's good for the central nervous system." When a Navajo boy was asked how it tastes, he said, "Good! But be sure an put sugar."

This write also tried mesquite bean soup, grinding the beans on a metate with a mano. When he asked a friend who is married to an Apache woman if his wife used a metate, he replied, "No, she puts them in the blender." Her method turned out to be much easier, the meal was finer ground, and had no mano and metate "sand" in it. There are also people who make mesquite bean jelly.

Prickly Pear cactus is a favorite for jelly making, the recipes almost as numerous as the pears. (Never, never, for get the lemon

juice!) One thing for sure, nothing can beat the color, which resembles Claret wine.

On the Well's rim walk, there are two collapsed ruins. It is often pointed out that one of them once consisted of fifty five rooms, and "You can see what happens to your place when you go away and leave it." A lady visitor made an appropriate comment one day: "It goes to rock and ruin."

Silt clouds are often evident below the surface of the Well. It is thought they are caused by slippage from the slopes of the rather funnel-shaped Well. The rooted pond weed holds some of the slopes from slipping.

Driving into the Monument, coming from Interstate 17, a dirt road with deep dips is encountered. At the beginning, on the right, are paved roads and street signs. This is called Montezuma Estates, and contains 674 lots. Southwest Land and Cattle Company promoted the sale of lots in this subdivision in the early seventies.

In 1974, Morley Safer came with a crew to do a segment of 60 MINUTES on the involvement of Southwest Land and Cattle in land fraud. The writer had a chance to talk with Safer and his crew when they came to his home looking for an electrical hook-up for the filming. Safer interviewed the Assistant Attorney General of Arizona, a saleswoman for Southwest Land and Cattle, and Fern Ducher, an elderly lady who had paid \$6000 for one of the lots without ever receiving title. After the filming, an offer to tour Montezuma Well was turned down due to lack of time. The entire crew did, however, make use of the telephones and bathrooms during the afternoon. Their visit was most enjoyable.

A U.S. Geological Survey team came to the Well for two weeks in the spring of 1991. They divided the well into 100 meter grids and explored the bottom of the Well for four days. They found two vents, one 100 feet deep and the other 140 feet, with lots of quicksand. They found no bones or fissures. Since their visit was covered well by the local papers, there were more tourists than usual. The dive Superintendent was overheard telling the head diver, "Don't take any chances," and the reply was "My ego won't let me."

The rangers and volunteers at the Well are comforted by the knowledge that if a visitor gets hurt or sick, the Montezuma-Rimrock-Fire-and-Rescue is able to reach the area in ten or fifteen minutes, sometimes less.

To the writer, Montezuma Well is a unique place of never-changing (and ever-changing) beauty, and a spiritual home. The sign down at the outlet doesn't say it all, but is worth noting here:

Take time to see the sky
Find shape in the clouds
Hear the murmur of the wind
and touch the cool water

Walk softly
We are the intruders
Tolerated briefly
in an infinite universe

THE END

Acknowledgements

I would like to thank the following people now living, and others who have since passed on, for their generous sharing of stories and remembrances which make up a large part of this informal history:

Dr. Dean Blinn, who talked me into doing it in the first place.
Ranger Jim Coleman, who, once I finally told Dean I would start it, wrote Dean's date for completion of the document on the calendar, a deadline I missed by over three years.

Helen Keckler, whose letters and pictures of the Back family were invaluable. Norman Fain, Esther Henderson, Gail Back, Cliff Cherry, Walter Cox, May Back, Gary Nabhan (Seedhead News), Alta Mae Dickinson, Ella Rose Smith Heydorn, Nellie May Smith Hart, Robert W. Munson, Dr. Emil Haury, Paul Webb, Virgil Bice, David Hopkins, Agnes Curtis, Helen Deuel, Sue Fain, Ruth Jordan, Clyde Dickinson, Marion L. Reid, Burt Brown, Alta Bruce, June Shill, Jesse Reeves, Kieth Anderson and Mark Cagle.

My wife, Dee, who could not have edited and word-processed this manuscript without her remarkable ability to decipher my handwriting.