Golden Eagle and Sparrow Hawk in aerial contest.
Lucy Telles, Basket Maker
By George Ross, Ranger Naturalist

During the summer of 1947, many visitors inquired about Ta-bu-ce (Maggie Howard). It was with regret that we, the Naturalist Staff, informed each inquirer that the aged basket maker passed away in January, 1947.

Since the war we are privileged to have Lucy Telles with us at the Indian demonstration area in the summertime, for she weaves with the same skill and perfection as Ta-bu-ce and is rapidly learning the advantages of conversation with her visitors. It is not uncommon to see her burst into hilarity as the occasion arises even though she seldom laughs with those who know her well. Her basket sales have increased accordingly and, all that remained of her summer's work were several lapel moccasins and bracelets. Possibly most of her visitors realize that her trinkets are original and lasting souvenirs of Yosemite National Park.

After many visits with Lucy Telles both at her home in the Indian Village and at the demonstration area, it has been possible to gather a few glimpses of her past. Due to her limited English vocabulary, her disregard of time and dates, and her skepticism of the white man's pen, it has been difficult to obtain a true chronology. But because Lucy will no doubt be the last of the basket makers in the Valley it is fitting that we should respect and know her better.

Lucy Tom Parker Telles was born to Brideport and Louisa Tom some seventy years ago near Mono Lake, Mono County, California (she approximates her age at seventy but cannot remember her birthdate). At a very tender age Lucy was wrapped snugly into a hiki (papoose carrier) and carried on her mother's back up Bloody Canyon and down through Little Yosemite to an Indian village at the base of Sentinel Rock. There she lived during her early childhood in true Indian fashion, grinding acorn meal for her mother, catching fish for the early hotel keepers and learning to weave baskets for family use. During these early years she remembers playing near the fence which surrounded Galen Clark's cabin in hopes of being rewarded with a soda cracker, a supply of which was always kept on hand by the Guardian of Yosemite Valley.

Lucy has lived in many places in the Valley due to the changes of season and the moods of her parents. I am informed that at one time she lived near the mouth of Indian Cave and actually used the mortar holes which can be seen near the location for grinding acorn meal. Lucy Telles' grandmother lived in Indian Cave during her entire lifetime, only moving out of the Valley during severe winters.
Bridgeport Tom, Lucy’s father, was born near Bridgeport, Mono County, around 1850. Being a full blood Piute medicine man, he is known even today by many of our modern Indians as a man of unusual ability. It is said that he brought rain or snow whenever he traveled and it was not uncommon to see other Indians postpone a hunting trip when Bridgeport Tom ventured forth. His healing powers were phenomenal according to Lucy, who tells of one of her cousins who was accidentally wounded with a shotgun while hunting. Bridgeport Tom was called after several white doctors had proclaimed the young man a hopeless case. The Medicine man prepared many concoctions and danced around the patient for several hours. Finally, when satisfied with the number of curious and faithful bystanders, Bridgeport Tom brought forth a tin pie pan, and, with a series of magic words, all of the lead pellets dropped from the wound with a great clatter, much to the satisfaction and glee of the onlookers. The patient completely recovered within several weeks.

Bridgeport Tom worked for many years in Yosemite Valley driving teams of horses for both the Government and private individuals. He was an unusual horseman and it is said that his steeds responded as well to the spoken word as to the bridle. Modern Valley Indians remember his ability with horses, no matter how wild or unmanageable.

Bridgeport Tom was particularly fond of the giant Ponderosa Pine located on the south side of the Valley, and, being a medicine man, he told relatives that he would one day carry the spirit of the great tree with him to the Happy Hunting Ground. Sure enough, the tree died within two years after the death of Tom.

Louisa Tom, born Louisa Sam in Mono County, is the mother of Lucy Telles. At present she is slightly over ninety years old and lives with her daughter in the Indian Village below Camp 4. Louisa Tom is amazingly straight and spry for her age and can frequently be seen walking about the village area, chatting in the Piute and Yosemite languages, for she knows both. She speaks little English, which is regretable, for many a story of the Indian days will be lost forever.

Jack Parker, Lucy’s first husband, was a full blood Piute, and died in the early 1900’s. He left Lucy with a young son, Lloyd Parker, now 42 years old and employed by the National Park Service. In 1912, John Telles, a young Mexican, came to Yosemite Valley after hearing of the many pretty girls to be found in this region. The Miwoks and Piutes were engaged in the playing of Hand Game at the Indian encampment where the Louis Memorial Hospital now stands.

Lucy was there, dressed in her finest and John Telles fell madly in love with her during this first meeting. On October 14, 1914, Lucy Tom Parker was married to John Telles at Bishop in the Catholic Church.

Returning to the Valley, John engaged in various jobs with the National Park Service, until his health began to fail. The couple moved to a homemade u-ma-cha located to the rear of the Postoffice where they lived for several years in true Indian style. John Telles, Jr., was born in 1922 and it became necessary at that time for Lucy to support the small family, due to her husband’s poor health. It was then that she turned her hand to basket weaving. For many years previous to this time Lucy had helped her mother in basket making, taking long trips to Mono Lake in search of
willow. With each addition to the family, hikis were made. All sizes and types of baskets were woven for family use until Nelson L. Salter offered to purchase any additional work which Lucy might complete for sale in his store in the Old Village.

With the increased family income Lucy decided to devote four years of her life to the making of a huge basket, nine feet, three inches in circumference and three feet high. She utilized all of the skill in her ancestry, using the ancient patterns of her people. The great basket soon became famous among the Miwok and Piute people and it was not long before Lucy was asked to exhibit her work at the World’s Fair in San Francisco. Her basket took first prize.

While visiting Lucy at the Indian demonstration area at the rear of the Museum, I was informed by her that the Ahwahneeches who originally lived in the Valley used the inner stem of deergrass (Muhlenbergia rigens (Benth) Hitchc) for basket making since willow was not plentiful on the Valley floor. Deergrass is amazingly strong and not at all brittle as might be expected. With modern transportation it is comparatively easy for John Telles to collect choice willow near Mono Lake where it grows in abundance.

With the passing of Lucy Telles will go the last of the Valley basket makers. The younger generation has lost the ancient art, for lack of interest. There will be no more acorn cakes passed among the curious visitors or beautifully designed baskets on display. Then we will turn to the Indian Room in the Museum and wonder that human hands could create such a work of perfection.

We are, indeed, grateful that Lucy is with us and hope that she returns for many more summers to add to our memories of an original American and a grand old lady:

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**A NEW PARK RESIDENT**

*By Robert N. McIntyre, Acting Assistant Park Naturalist*

Our readers will be interested to know that two groups of golden beaver (Castor canadensis subaustratus Taylor), the largest rodent in California, have moved within the boundary of Yosemite National Park. It seems rather fitting that the animal which caused the exploration of our great West and the ultimate gain of our western states should choose to become a resident in one of the first great wildlife sanctuaries to be created by congress.

February 3, 1948, I was notified by Mr. Carrie Jackson, ex-ranger and chinchilla farmer at Fish Camp, that a colony of beavers had moved down Big Creek and into the park. On the 20th of February, Ralph Anderson, Information and Editorial Specialist, and I made the trip to Big Creek. Within Section 14, Township 5 S., Range 21 E., inside the park boundary, we found three beaver dams, one large and two small.

Cuttings in the form of willow poles and felled cottonwoods were first observed along the creek inside the boundary fence. Cottonwoods partially peeled for food and dismembered for construction material were found in the meadow area near a small dam and slightly upstream from the largest dam which was somewhat S-shaped with a height of from two to five feet and a breadth of slightly more than 100 feet. Snow was on the ground and ice above the dam was solid enough to walk upon.

No beavers or their tracks were observed and no house or lodge could be recognized. Cuttings and the larg-
est dam were examined and photographed from several angles. A short reconnaissance down stream for one-fourth of a mile and up a branch creek failed to show more dams.

The work observed in this area extended not more than 1,000 feet inside the park at an elevation of approximately 4,500 feet. Food in the form of willow and black cottonwood is fairly plentiful. A study of the cuttings led me to believe that the main portion of the largest dam is about one year old. The newer cuttings were made not later than November or December, 1947. Based upon experience gained in the study of beaver in Washington State, I believe that not more than one pair of adult beavers and their young of the 1947 season inhabit the area within the park at this point. It can be reached by travelling on foot one-quarter mile due west of the cattle-guard at the park boundary south of South Entrance Station.

In early March, while I was collecting data on beaver plantings in this area through the courtesy of the State Division of Fish and Game and attempting to find records of beaver in old patrol records dating back to 1891, a new and rather startling development took place.

On March 11th, Park Forester Emil Ernst discovered the work of beaver in the Wawona Meadow on the stream in front of the Wawona Hotel and within twenty-five feet of the main highway to South Entrance Station. One very small dam was observed on that day at an elevation of approximately 4,100 feet. Mr. Ernst collected samples of beaver cuttings made on willow and turned them over to the Park Naturalist along with his data.

Two days later, on March 13th, I, in company with Rodger Rust and Bob McIntyre, Jr., made a study of the area. A good portion of the Wawona Meadows was explored. Two very small dams not over sixteen inches high and from six to eight feet in breadth were found just above the culvert pipe which runs under the Chowchilla Cutoff Road in front of the Wawona Hotel. Cuttings were found in the stand of willow near the dams. No willow was severed more
than twenty inches above the ground. A study of the 24-inch culvert showed that an attempt had been made by the beavers to plug it up, but someone had pulled out most of the work. Only two small twigs remained and they were not effective.

A study of the willow cuttings in the creek bed leads me to believe that both of the small dams were built in the late fall of 1947. Some fresh food cuttings found in the stream and lodged against the dams indicate that within the past month one or more young beavers have had lunch in the area. No photographs were made of the dams but chips from cuttings were collected to facilitate the study of these beavers' toothmarks.

At this time an answer should be given to the question, "From where have these beavers come?" The California Division of Fish and Game, an agency of conservation which has cooperated with this national park since 1894, supplies the information. Two areas near the boundary of Yosemite were planted with golden beaver from wild stock trapped in the vicinity of Snelling on the Merced River and in the area near Waterford on the Tuolumne River.

In April of 1940 three beavers, two adult males and one adult female of Snelling stock were planted in Acker-son Meadow west of Yosemite near Mather Station. These increased rapidly and in 1947 about 20 dams had been built in the meadow area. To our knowledge none has yet entered the park.

In May of 1944 four beavers were planted in Big Creek near Fish Camp, to the south of Yosemite. Again, in October of 1944, five more were released at this point; four males, three females and two of unknown sex. Since their release a number of dams have been observed in the stream along the road near Fish Camp.

The beaver work described in this article has been made possible by the natural increase and spread of the beavers planted in Big Creek. Since Big Creek runs into Yosemite National Park in Section 14, Township 5 S., Range 21 E., below South Entrance Station, it is only natural that the growing colony would utilize every likely meadow and stream in that area.

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Beaver dam on Big Creek, approximately 1,000 feet inside the Park Boundary, February 20, 1948. Height of dam ranges from five to seven feet. —Photo by Anderson
But the location of beaver in the Wawona Meadow by Section 34, Township 4 S., Range 21 E., is another matter. This meadow area is not on Big Creek or its tributaries. Big Creek does run into the South Fork of the Merced River about one mile west of the lower Wawona Meadow, indicating that beavers may have followed down Big Creek for some six and one-half miles and then turned up the South Fork of the Merced River looking for suitable food and water.

Another possibility is that scouting beavers from Big Creek crossed over the hill to the north by way of South Entrance and discovered the Wawona Meadow area with ample willow growth. A more thorough study of the South Fork of the Merced River and its tributaries such as Bishop, Alder, and Chinuñna Creeks must be made to determine the spread of the animals and their utilization of lush willow growth found in those places.

 Authorities on the California golden beaver believe that in past years the form did not make its home in Yosemite National Park; certainly not the golden beaver, which is a bank burrower and for years has frequented only the lush meadow areas of the San Joaquin and Sacramento Rivers of California at elevations well below 1,000 feet. The lack of records and reports in the history of Yosemite seems to substantiate this belief.

However, I take a stand against this on two counts. Since the golden beaver have been planted near Yosemite at an elevation of 4,500 feet and are doing very well, why couldn’t these lowland beaver have lived here years ago and become extinct due to early trapping? Another thing that causes wonder is my own casual observations made in the summer of 1942 while fishing the Tuolumne River between Glen Aulin and Hetch Hetchy. Two rounded stumps below Glen Aulin sticking from the crumbling bank of the river and one white fir tree four feet in diameter with a depression in one side found near the upper limits of Hetch Hetchy reservoir have led me to believe that more investigation is needed before we can say definitely that beaver have never been in Yosemite. A study of the stream beds of both Alder and Bishop Creeks may prove that signs of old beaver dams still exist within the park. The reader’s cooperation is invited in throwing light on this subject. The memory of early settlers, old letters, obscure records, or the memory of casual observations made by rangers in past years may shed further light on the problem.

With the publication of this article I am aware that a great deal of interest will be centered around the beaver dams mentioned. It is hoped that each observer will take every possible precaution while visiting the sites to see that the beavers and their dams are not molested in any way. The collection of beavers or samples of their work will not be tolerated by the National Park Service.

The sight of a golden beaver in the early morning or evening will be a rare treat to most students of nature. The average adult animal is short legged, short necked, weighing 40 pounds with a compact body 30 inches long and a flat paddle-shaped tail about half as long as the body. The eyes and ears are small, the face heavy and round showing heavy incisor teeth. The dry fur of the animal is golden brown. The hind feet are webbed with five toes bearing claws dark colored and scaly like the
The forefeet are five-toed and dark colored with heavy claws but not webbed.

In the water the beaver swims by using his hind feet only, while his forefeet are held along side of the body. The tail acts as his rudder but may spank the water as a sign of warning when the animal is frightened. On land the beaver is rather helpless in defending himself against man, dog or bear. He waddles slowly on all four feet and swishes his tail from side to side as he does so. When frightened, he gallops toward water and spanks the ground with his tail as a means of extra propulsion. In water the beaver swims with only his eyes, ears and nose above the water. When he dives for food or protection he can remain under water for as much as four minutes. When observed at work on a dam or its repair one finds that the teeth and forelegs are his tools. The tail at this time is used as a third member for support only. He cuts trees for food, for material in making shallow dams, and just for the exercise that his teeth need.

Unlike his cousins in the northwest, the golden beaver makes his home in a burrow dug from overhanging banks. At times, when his burrow caves in, he may cover the top over with brush and convert it into a rough lodge or house but this isn’t common. At times, when banks higher than the level of the stream are absent, he may have to make a rough house out of sticks, poles, boards and mud. The area on Big Creek and at Wawona Meadow is such that these animals should find it easy to burrow under the banks of the stream. These burrows begin below the surface of the stream and project upward until dry ground is reached. A pair of beaver and their young not more than one year old occupy a small burrow.

Beaver are believed to be polygamous. The breeding season begins in January and the first young of one to four in a litter are born in April. The little fellows are 15 inches in length and weigh about one pound at birth. They are nursed until they have cut their incisor teeth. After this time the mother takes them on trips out into the watery world and they begin to use their teeth to gather food and cut trees.

They feed on such trees as the willow and the black cottonwood. In the summer time they eat the roots and bulbs of aquatic plants. By fall the tender stems of the cattail and tule offer a good meal. Alder and oak trees felled by the streams are utilized not for food but for building material.

Beaver dams are built mostly in late summer and fall when the
waters of the streams must be held to make the marshy places to which the animals are accustomed. Dams are usually S- or crescent-shaped and seldom over three feet in height with an extreme breadth of about 100 feet. Food cuttings are seldom stored on the bottom of the stream above the dams in California due to the fact that even in the winter time a beaver can come out of his burrow and cut a meal at his leisure. The mild climate makes the life of the beaver very leisurely as compared to his northern cousins.

The ditches and runways used by the beavers can usually be identified above and below their larger dams but the clear imprint of a beaver track is very hard to find. Smudged tracks in their ditches a few inches under the surface of the water can often be observed but on soft earth or sand where an imprint of the hind feet should be readily available, the observer will be disappointed. The gait of the walking animal, the fact that his fur drags on the ground, and the action of his switching tail, causes tracks to be all but obliterated in a period of about two years of intermittent observations in Washington State in 1938 and 1939 I was able to study only a few front tracks of beaver on the sides of dams and never a track of the rear foot.

The aesthetic value of beaver in Yosemite should not be underestimated. The opportunity to show to three-quarters of a million persons annually the work of the beaver along a main park highway is indeed something that can be appreciated.

During the days of the Civilian Conservation Corps in Yosemite, a work project was set up to decrease the amount of erosion in the park meadows which had been severely overgrazed by sheep and cattle during the national emergency of World War I. The CCC did a very complete job and brought erosion of the Wawona Meadow under control, but since those days no money has been available to maintain their work. Now with the coming of the beaver to that area, we can expect great things in the natural conservation of the meadow from the beaver dams which will be found there.

PHOTOGRAPHY IN SCIENCE

1948 will see the celebration of the Centennial of the American Association for the Advancement of Science. The Second Annual International Photography-in-Science Salon will be an important feature of that Celebration. During the Washington Meeting of the AAAS (September 13-17), the prize-winning and other accepted entries in the contest will be on exhibition in the Natural History Building, U.S. National Museum.

The Centennial Celebration will be attended by thousands of scientists from all parts of the country—there were more than 8,000 at the Chicago Meeting last December. In view, therefore, of the widespread interest in both photography and science, we hope that entries will be submitted in this competition from our readers. Entry blanks may be obtained by addressing The Salon Committee, American Association for the Advancement of Science, 1515 Massachusetts Ave., N.W., Washington 5, D. C. (D. E. M.)