

NATURE NOTES
OF
GRAND CANYON

IN MEMORIAM

GLEN E. STURDEVANT,
Park Naturalist
March 25, 1895 - February 20, 1929

and

FRED JOHNSON,
Park Ranger
October 25, 1898 - February 20, 1929

"These are two friends whose lives were undivided;
So let their memory be, now they have glided
Under the grave * * *" ---Shelly.

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GRAND CANYON NATURE NOTES

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This Bulletin is issued monthly for the purpose of giving information to those interested in the natural history and scientific features of the Grand Canyon National Park. Additional copies of these Bulletins may be obtained free of charge by those who can make use of them, by addressing the Superintendent, Grand Canyon National Park, Grand Canyon, Arizona.

M. R. Tillotson, Superintendent. -----Park Naturalist.

OUR SORROW

Friends of the National Park Service and of Grand Canyon National Park will be shocked and grieved to learn of the untimely death by drowning of Glen E. Sturdevant, Park Naturalist, and Fred Johnson, Park Ranger.

This irretrievable loss occurred on the morning of February 20 when, in company with Chief Ranger James P. Brooks, Sturdevant and Johnson were returning from a ten day trip in the Canyon, the object of which was the collection of specimens of scientific interest, securing data on Canyon flora and fauna, search for pre-historic ruins and other objects of archaeological interest as well as a general exploration of some of the unknown regions of the Canyon.

While breaking camp that morning the boys had been congratulating themselves on the fact that, although they had been in some rather dangerous places, the trip had been completed without the slightest accident and they now had only to go on out, the expectation being that they would reach home that afternoon. In crossing the Colorado River, however, their boat was caught in an eddy and Johnson was thrown in to the water. Brooks immediately jumped overboard to his rescue, but failed to reach him and was himself swept downstream in to the rapids. In the meantime the boat containing Sturdevant was also caught in the rapids and Brooks in the water, most of the time being drawn below the surface by the undercurrent, saw no more of him. How Brooks ever escaped he does not know, but he finally found himself cast ashore more dead than alive. When he regained consciousness he still had to wait for some time before gaining sufficient strength to drag himself from the water and was completely numb from the effects of the icy cold stream. He spent two hours in a vain endeavor to find some trace of his comrades then climbed to the Tonto Plateau on the north side of the river, made his way to the Kaibab suspension bridge and hiked up the trail to headquarters.

Immediately upon receipt of Brooks' report one searching party was sent down that night, two other parties (Brooks being a member of one) left the next morning at five o'clock and still a fourth party was on the river by 3:30 Thursday afternoon. A boat at Hermit Creek was manned Thursday

night and started upstream at daybreak Friday morning. The boat crew consisted of four men who found the body of Glen Sturdevant Friday afternoon at a point about two miles below Horn Creek rapids, in which the accident occurred.. The search for Johnson's body was unavailing and was finally abandoned except that a watch is still being maintained further downstream.

A double military funeral was held under the auspices of John Ivens Post No. 42, The American Legion, at the community building, Grand Canyon, Tuesday afternoon, February 26, the tenth anniversary of the creation of Grand Canyon National Park. To celebrate this event a big birthday dinner and dance had previously been planned for this day. February 26 was therefore a day of sorrow and mourning rather than one of feasting and celebrating as had been planned.

Glen was laid to rest in the village cemetery alongside the Grand Canyon he loved so well and for the cause of which he gave his life. Fred still sleeps in the Canyon, itself, and a more fitting grave no National Park officer could have. After the military detail had fired its volleys over Glen's grave and after the bugle had blown "Taps," then the military escort proceeded with the family and many friends to Powell Memorial Point, where another round of rifle shots was fired over the Grand Canyon, Fred's grave, and where again the notes of "taps" echoed and re-echoed from the Canyon walls.

Just as truly as if they had fallen on the field of battle, these ~~men~~ brave men laid down their lives in the service of their country. Their lives, their work and their death will always be an encouragement and an inspiration to those of us who are left to carry on. May we not fail them.

Some interruption in the publication of the Nature Notes may be expected. This issue, however, contains two articles which Mr. Sturdevant, with his customary forethought and interest, had prepared before leaving headquarters for his last Great Journey. There is here included also the obituary of each of these men as it was read at the memorial services.

- - - M. R. Tillotson.

* * * * *

GLEN ERNEST STURDEVANT

Glen Ernest Sturdevant was born in Laceyville, Pennsylvania, March 25, 1895. He attended public schools in Pennsylvania and later at Santa Ana, California. After several years' work at the University of California, he graduated from the University of Arizona. At the time of his death he was engaged as Park Naturalist for the United States National Park Service in Grand Canyon National Park. His appointment to that service having been made May 16, 1925.

The official records of the War Department state that he enlisted first at Santa Ana, California, on August 30, 1915, in Company L, 7th Infantry, California National Guard. He was mustered into Federal Service on June 29, 1916 and mustered out on November 11, 1916. He was again inducted for

Federal service September 20, 1917 at Towanda, Pennsylvania, and assigned to Company H of the 314th Infantry. On August 25, 1918 he was honorably discharged in order to accept a commission as second lieutenant, infantry, which he received on August 26, 1918. He was then honorably discharged at Camp Jackson, South Carolina on April 28, 1919.

Mr. Sturdevant was married December 23, 1923 to Eileen Fourcade, who with two children, Glen E. Junior, and Tyler Rugg survive him.

Mr. Sturdevant's work as a naturalist and as a scientist was particularly noteworthy. He initiated the Grand Canyon Nature Notes which have been regularly issued each month and which are eagerly looked for by many nature lovers throughout the entire country. His nature walks, camp fire and museum lectures have continually been a source of inspiration and pleasure to thousands of Park visitors. It was always a great source of satisfaction to Mr. Sturdevant to be able to create in others an interest in the works of nature and a desire for nature study.

Through his research activities along many lines, particularly those of geology and paleontology, he had made many contributions to various scientific publications and to the cause of science in general. By such noted scientists as Dr. John C. Merriam of the Carnegie Institution, Dr. David White of the Geological Survey, Dr. Charles Gilmore of the Smithsonian Institute and by many others of equal rank, Mr. Sturdevant was rapidly becoming known as an authority.

His friends were all those who had ever known him, even casually. His enemies were none. His loss is one that will be keenly felt and forever mourned not only by the members of his family, his many friends and associates and his fellow officers in the National Park Service, but also by the entire world of science to which he had made so many valuable contributions and in which he had such a brilliant future.

FRED JOHNSON

Fred Johnson was born in Kanab, Utah, October 25, 1898. His education was received in the schools of his home town, upon the completion of which he engaged in the various agricultural, cattle raising and general mountaineering activities which later fitted him so admirably for his work as a Park Ranger.

Although he was under the age of twenty-one at the time war was declared, he offered his services to his country and was sent to training quarters at a university in Utah, from which he was honorably discharged in September, 1918.

Fred Johnson was married on April 26, 1926 to Georgia Ott of Dallas, Texas, who with one daughter, Joan, survives him. His domestic life was proverbial throughout the entire community for its beauty and devotion.

Mr. Johnson's first connection with the National Park Service was in November, 1923, when he was employed as a laborer. He later served in various capacities, as sub-foreman and foreman in charge of construction crews, until he was regularly appointed as Park Ranger on May 18, 1925, just two days after the appointment of Glen E. Sturdevant.

Fred Johnson was a man among men. His bravery, manliness and interest in his work was a source of the greatest inspiration to his fellow officers and associates. His cheerfulness at all times together with his keen sense of humor helped to make life more worth living for all who knew him. Fred was acknowledged to be one of the most valuable members of the force, and at the time of his death was in line for promotion to even greater responsibilities. His friends were legion and he never had an enemy.

In the natural course of events someone will be appointed to fill the vacancy caused by his untimely end, but in reality no one will ever be found to take Fred's place on the force, in the community and in the hearts of those who have always loved him.

FAWNS ARRIVE FROM KAIBAB

By G. E. Sturdevant

In order that the visitor to Grand Canyon National Park may be assured of a chance to see a semi-tame herd of Rocky Mountain Mule deer, the policy adopted by the National Park Service a little over a year ago of bringing fawns from the Kaibab to the south side of the Grand Canyon was again followed this season. Early in February fawns from the Kaibab were shipped by truck as they were a year ago last fall, to be released at Grand Canyon village. The story of their capture, domestication and later shipment to area needing restocking is one of extreme interest to the nature lover.

The fawns were received from Mr. Chas. Heaton of Heaton's Ranch, Moccasin, Kaibab Indian Reservation on the Kaibab plateau near the north boundary of Arizona and it might be well to state the method used by Mr. Heaton and others who make a business of capturing wild fawns.

The areas where these deer are most plentiful are in the Kaibab National Forest and the United States Forest Service supervises the capture of wild fawns. Upon application to the office of the Forest Supervisor at Kanab, Utah, a permit may be granted to capture a certain number of fawns in a designated area. The Forest Service guarantees the permittee a sale by November 15th for each fawn raised with a price of around \$25.00 for bucks and \$30.00 for does. Efforts are made to capture fawns four or five days old since it has been found that at this age they are easier to catch and they respond better to captivity. The permittee attempts to capture his quota between June 15 and July 15.

The method employed by the permittee in capturing fawns is rather unique. It is practically impossible for a man to run down a fawn even at this tender age, so he goes to his assigned area with a few trained dogs. Upon spotting a fawn of the desired age the dogs are released and the chase is on. Ordinarily this is of short duration since the fawns tire easily and are then pushed down by the dogs, which hold them under their paws, without attempting to hurt them in any way, until the permittee arrives. The animals are then placed in crates or in darkened compartments on a truck. Within twenty-four hours the animals are brought to the ranch and during this period they are given water but no food.

At the ranch they are placed in pens darkened with canvas. Unless there is taken the precaution of darkening the crates on the trucks and the pens at the destination the fawns oftentimes fight captivity until they die. When placed in the pens the fawns are given warm, fresh cow's milk diluted with water. Within a week they are accustomed to man and will take small quantities of other feed. Bran and oatmeal are added to the menu and within a remarkably short time the fawns become accustomed to their new surroundings and to contact with human beings. Soon they may be turned loose in a small fenced area to browse on natural feed.

This latest shipment of fawns was brought to the South Rim by two trucks which made the trip by way of the new Lee's Ferry bridge and arrived here on February 6, after having been thirty-four hours on the road. The original shipment consisted of ten fawns. One failed to survive the trip, but the other nine arrived in splendid shape and are objects of the greatest interest to our South Rim visitors.

BEAVER AT PHANTOM RANCH

By G. E. Sturdevant

Beaver, buffalo, and gold are called the three major factors that brought about an early development of the west. The beaver and buffalo suffered from the inroads of civilization to the extent that fears of extermination were once voiced. There is a record of beaver trappers having visited the Grand canyon as early as 1826. After most of the beaver were removed from the tributaries of the Colorado the few survivors attempted to perpetuate their kind. That they succeeded is evidenced by finding colonies in several of the streams within the park, and at one place they are a menace to man's efforts to reclaim a portion of the desert wastes.

When Phantom Ranch was established in 1922 near the mouth of Bright Angel Creek, the site was covered with cactus, cats claw, mescal, and a rank growth of arrow weed, and willow. In time this waste land was transformed into a veritable garden spot. Small areas bordering the stream were cleared of rocks and native plants and the rich alluvial soil now produces shade and fruit trees and vegetables to appease the desires of the numerous visitors who annually visit "the deepest down camp in the world." The long rows of cottonwood shade trees thrived exceedingly, retaining their verdure in this sub-tropical climate the greater part of the year.

Recently, however, some passing beaver sensed their proximity to the stream and whether it was food or material for a dam that he desired, he began gnawing away on a tree some six inches in diameter. Morning found the tree nearly severed from its base. A slight breeze during the day accomplished the unfinished work of the beaver. Some remedial measure was necessary even in a wild life sanctuary.

After consulting the U. S. Biological Survey it was decided to purchase a live beaver trap. As soon as the trap arrives it is planned to trap the beaver at Phantom Ranch - carry them in gunny sacks up the stream and release them in the vicinity of cottonwood where felled cottonwoods, beaver gnawings and occasionally a dam conveys to the Park visitor the presence of these constructive engineers.

FAVORABLE SNOW CONDITIONS

Since there is a direct relationship between winter precipitation and range conditions for the following summer Park officers are quite optimistic as to an abundance of feed for the Kaibab deer herd next season. Snowfall throughout the Park has been uniformly heavy all season, especially on the North Rim. There, at the present time, the snow on the ground at Bright Angel Ranger Station measures approximately sixty-four inches. On the flats below, the average depth is about one foot greater, and heavy snows have been uniform over the entire Kaibab Plateau region.

Snow does not last so long on the South Rim as it does on the other side of the Canyon, and although the average depth on the south side at the present time is only about six or eight inches the total snow fall for the season on the South Rim to date has amounted to 51.4 inches. The same condition of heavy snows is reported generally throughout the State, especially on the headwaters of streams feeding the larger reservoirs. Cattlemen, agriculturists dependent upon irrigation and the business interests of the State in general are therefore quite encouraged as to the outlook for the coming season.