This is the official publication of the Educational Department of Yosemite National Park. It is published each month by the National Park Service with the co-operation of the Yosemite Natural History Association, and its purpose is to supply dependable information on the natural history and scientific features of Yosemite National Park. The articles published herein are not copyrighted as it is intended that they shall be freely used by the press. Communications should be addressed to C. P. Russell, Park Naturalist, Yosemite National Park, California.

E. P. LEAVITT
Acting Superintendent
THE STORY OF TRAIL BUILDING IN YOSEMITE NATIONAL PARK

By Gabriel Sovulewski

Of the 600 miles of trails that exist within Yosemite boundaries, by far the greater part have been built within the past thirty years. In searching the old park records made by the state park guardians, and the army superintendents of the national park, it became apparent that dependable trail history was exceedingly difficult to obtain. In order to supply that increasing number of Yosemite back-country enthusiasts with data on their favorite trails, I have asked our park supervisor, Gabriel Sovulewski, to provide the following notes. With this information as a starter, details in history can be prepared.

Mr. Sovulewski first came to Yosemite in 1895 as quartermaster sergeant with the United States army. In 1906 he came to the Park as a civilian employee of the United States army, and since that time has held the position of park supervisor. It has been his responsibility to make all parts of Yosemite's 1125 square miles accessible, and to keep them so. After these many years of trail building, his enthusiasm for such construction wanes not at all. Just now a trails committee appointed by Director Mather is expressing its beliefs regarding interesting foot trails along Yosemite walls, and Mr. Sovulewski grins like a boy as he makes his explorations in anticipation of putting his construction gang to work.

—C. P. R.

Yosemite, Calif., Oct. 18, 1927.
C. P. Russell, Yosemite National Park, Calif. Dear Mr. Russell: This is written in compliance with your request for an outline of the history of trails construction in Yosemite National Park.

Most of the trails in the park were blazed and constructed under army administration under contract by different parties, from time to time, as allowance of appropriation was made for that purpose by the Interior Department.
The real pioneer of trails location and construction was Col. H. C Benson. However, other army officers were always favorable to trail developments, and among these was Col. W. Forsythe, who practically followed Colonel Benson's footsteps in that respect.

There were few trails that should be called trails before Yosemite became a national park, with the exception of routes between Wawona, Glacier Point and Yosemite valley. Those trails were the oldest and best laid out trails in existence when the army took charge of Yosemite park in 1891. All other trails beyond the rim of Yosemite valley were nothing more than cattle and sheep trails and burro passes.

The record of trails that were constructed under different contracts could be found in the files kept by the various army superintendents by whom they were built. In some cases the first trails have been entirely abandoned and rebuilt, and in almost all cases they have been improved, not as much as ought to be done, but, as far as maintenance funds permitted. The contract constructed trails that are in existence unchanged or partly rebuilt, are as follows:

- Lake Eleanor and Beehive trail.
- Jack Main Canyon trail.
- Lake Vernon and Tiltill Valley trail.
- Tiltill Mountain to Paradise Valley trail.
- Tilden Lake trail.
- Stubble Field and Kerrick Canyon trail.
- Bear Valley trail.
- Rancheria Mountain to Pleasant Valley trail.
- Pleasant Valley to Rodgers Canyon trail.
- Rodgers Canyon to Benson Lake trail.

Seary Pass trail.
Matterhorn and Benson Pass trail.
Burro Pass and Matterhorn trail
McGee Lake trail.
Glen Aulin to Matterhorn trail.
Cathedral Pass and Sunrise Mountain.

About four miles of Clouds Rest trail.
Conness Mountain and Mono Pass trail.
Parker Pass trail (in part).
McClure Fork, Vogelsang Pass, Evelyn Lake and Ireland.
Creek trail (which is partly abandoned).
Mono Meadow and old Buck Camp trail via Crescent and Johnson Lake, also branch to Ostrander lake.

Isberg pass and Fernandez pass trails were partially thrown outside of the park when park boundaries were changed. The same was true of those trails leading to Devil's Post Pile, Agnew Meadows and Parker pass. The remaining portions of Fernandez and Isberg Pass trails were either abandoned or rebuilt entirely.

All the above mentioned contract trails have been relocated, rebuilt or partially-improved.

The trails which were located and built by me under different administrations, army and civilian, between August 12, 1906, and October 1, 1927, are as follows:

- Tenaya Canyon from Mirror Lake to Tenaya Lake, approximately twelve and one-half miles.
- North Dome trail from Yosemite Point to junction of Tenaya Lake trail at Snow Creek, about nine miles.
- Hetch Hetchy trail from junction of Eagle Peak trail to Hetch Hetchy via Harden Lake and Smith's Meadows to Hetch Hetchy—about twenty miles.
Merced Lake trail from junction of Cloud’s Rest trail to Merced Lake—seven and one-half miles.

Washburn Lake trail, from Merced Lake to Washburn Lake and Lyell Fork of Merced river above Washburn Lake—five miles.

Babcock and Emerick Lakes trail from junction of McClure’s Fork trail to the head of Rafferty Creek Pass and to Lyell Fork of the Tuolumne river—twelve miles.

Donohue Pass trail from the junction of Ireland Creek at Lyell Fork to Donohue Pass—six miles.

Ireland Creek trail, along Ireland Creek to Ireland Lake—three miles.

Buena Vista trail, from junction of Glacier Point trail via Buena Vista Creek, Buena Vista Lake, Royal Arch Lake, to Buck Camp—fourteen and one-half miles.

Merced Pass trail from junction of Mono Meadows trail to Merced Pass and Moraine Meadows trail junction—twelve miles.

Short cut from Mono Meadows Ford over Illilouette Creek to junction of Merced Pass trail—two miles.

Fernandez Pass trail, from Fernandez Pass via Moraine Meadows to Buck Camp—ten miles.

Ten Lakes trail from junction of Hetch Hetchy trail via Yosemite Creek to Ten Lakes—nine and one-half miles.

Tuolumne Canyon trail from the junction of Hetch Hetchy trail at Dark Hole via Lukens Lake, Pate Valley, Glen Aulin to Soda Springs and Tuolumne Meadows—thirty miles.

Pate Valley via Piute Creek to junction of Pleasant Valley and Rodgers Canyon trail—five miles.

Forsythe Pass trail from junction of Sunrise mountain trail to Lake Tenaya and branch to Cloud’s Rest—eight miles.

Ledge Trail to Glacier Point.

Relocated and rebuilt about three miles of Cloud’s Rest trail, also relocated and rebuilt about two miles of Half Dome trail, and about three or four miles through Little Yosemite to Lost Valley.

Rebuilt Vernal and Nevada Falls from Silver Apron Bridge to the top of Nevada Falls.

Rebuilt, improved and relocated entirely 3000 feet of Yosemite Falls trail.
Relocated and rebuilt portions of trail between Nevada Falls and Glacier Point.

In 1911 four miles of trail from the North Dome trail near Indian Creek to the Tioga road at Porcupine Flat was constructed.

The old 1855 trail from Yosemite Valley to Old Inspiration Point was relocated and rebuilt. This new trail is about four miles in length and starts at the Pohono Bridge.

Rebuilt and replaced all bridges on trails around the rim of the valley and on the floor of the valley, with the exception of Pohono, El Capitan and Clark’s Bridge.

Widened, improved, graded, gravelled and rebuilt all roads on the floor of the valley with the exception of four or five miles between Pohono Bridge and Old Village, which was rebuilt under contract with our engineer in charge.

Located and built Mirror Lake road from junction above Tenaya Creek Bridge along Tenaya Creek to Mirror Lake.

Located and built about fourteen miles of foot and bridle paths on the floor of the valley.

Relocated and rebuilt Mather Station road from junction of Tioga road to Mather Station—approximately six miles.

Improved, relocated in places, and reduced grades on all mountain roads within park limits. Also worked on eight miles of road outside of park limits between Wawona and Mariposa Grove.

It is quite impossible to give an account of all work done during the twenty-five years or more in national parks, in the army and in civil life. It is necessary to bear in mind that the credit is not all due to me, even though I did work hard. Most of these improvements were made on my suggestion, and sometimes at my insistence I share the credit with all superintendents under whom I have served. They gave me freedom to do the work which I have enjoyed immensely.

Personally, I consider it the greatest consolation and happiness in life to love one’s work. On that account I can claim no unusual credit to myself, for I have found a pleasure in doing these things.

Sincerely yours,
GABRIEL SOVULEWSKI.

WESTERN RED BUD

Just now Yosemite-bound tourists are much impressed by the glory of the multi-colored lower Merced canyon. Every plant of the region has responded to the rising temperature and spring rains. Rich grasses carpet the slopes and immense beds of gold, blue, red and white flowers mottle the canyon walls. The Red-Bud that present leafless, shrubby growth is at the height of its glory and many questions regarding it are asked.

Its flowers are red-purple and enfold the branches in a perfect blaze of beauty. Close examination of the blossoms reveals their similarity to sweet pea and hints at a relationship to acacia. The leaves will not appear until later and even then the shrub will be very attractive for the blossoms will be replaced by clusters of long purple pods, which will droop gracefully among the leaves.

A related species of this genus, ceras, grows in Palestine. According to tradition it produced white flowers originally, but the traitor Judas, hanged himself from its limbs, and the tree blushed pink with shame.

Local Indians use the slender twigs of the Sierra species in basket making.
FARE OF THE GOLDEN EAGLE

By George M. Wright

What of the lordly eagle! His eye is piercing bright, superb his grace in flight; and majesty is in his bearing when he deigns to stand on earth. His nest is up among the castle crags, his domain the sky. No other flying creature dares to challenge his kingdom of ether.

But what of the royal appetite? Fact and fancy interwoven through many a legend recount the fearless marauder’s fancies for such sizable prey as lambs, fawns, calves and even some weakened adult individuals of these same animals. No eagle ever took wing over scenes of more impressive grandeur than do those which soar about the domes of Yosemite. Here, if any place, they should be epicures. But alas! By actual observation, carrion carcasses of deer seem to be the leading article of diet, on a very plebeian menu. The birds keep one eye on the old garbage dump even though their spirit bids them soar to heaven, and they soon make light work of any bodies brought there for disposal.

Last winter three golden eagles were discovered at the lower end of the valley feeding on a young buck which had evidently been killed by a passing motorist. So great was their consternation at thus being surprised in their gourmandry that one of them flew right into the oncoming car confusedly but determinedly enough to sustain a broken wing. The eagle in the zoo relishes his prepared diet. Far from chafing in bondage with wild spirit ever yearning to be free, this bird recently refused proffered liberty in favor of the sheltered life and a certain dinner bell.

Though the apparent predilection for carrion may only be a result of the exigencies of winter, Mr. and Mrs. Charles Michael report that in seven years of close observation of eagles in Yosemite they have never seen one attack any living thing.

This seems to be the general experience even in other localities. During a recent field expedition among the mountains of the Alaskan Range, where golden eagles abound, they were seen almost every day and all day long for three months. Through all that time, though marmots screamed and lambs of the mountain sheep scrambled to cover whenever the eagles planed into sight around the shoulder of a mountain, not even one attempt to make a catch was noted.

Not to rob Yosemite’s eagles of one bit of romantic glory (after all nobody could shake this king of birds from the throne so pre-eminently his), but to ascertain the scientific facts concerning their food habits, it is to be hoped that more definite information will come to light in the future. The golden eagle is fast vanishing. His status would profit if it could be shown that stockmen and hunters have blackened his character unjustly or to unreasonable extent in the past.
MARKING HISTORIC SPOTS

By C. P. Russell

The Native Sons organization of California has for some years past engaged in the laudable enterprise of placing markers on the sites of historic happenings, settlements and buildings within the state. Recently a committee has investigated the desirability of marking such spots that exist in the vicinity of Merced, Mariposa and the "Southern Mines."

One spot in the Yosemite region that should by all means be given consideration by this committee is the site occupied by the first trading station maintained by James D. Savage of Yosemite discovery fame. This station was established on the South Fork of the Merced river in 1849. It was there that the first Indian troubles originated, which in 1851 brought about the discovery of Yosemite valley. Today the place and events are unheard of, yet both are of utmost significance in the story of human happenings in the Yosemite country—a story in which increasing thousands are manifesting an interest.

Reference to the activities of J. D. Savage, most prominent of Mariposa pioneers, is fragmentary indeed. However, that invaluable account of very early human affairs in the Mariposa country, "Discovery of the Yosemite," by L. H. Bunnell, gives information on the man that is seized upon by present-day searchers.

Bunnell has this to say of that first near-Yosemite settlement: "My recollections of those early days are from personal observations and information derived from the earlier settlers of the San Joaquin valley, with whom I was personally acquainted in the mining camps, and through business connections; and also from comrades in the Indian war of 1850-51. Among these settlers was one James D. Savage, a trader, who in 1849-50 was located in the mountains near the mouth of the South Fork of the Merced river, some fifteen miles below the Yosemite valley.

"At this point, engaged in gold mining, he had employed a party of native Indians. Early in the season of 1850 his trading post and mining camp were attacked by a band of Yosemite Indians. This tribe, or band, claimed the territory in that vicinity, and attempted to drive Savage off. Their real object, however, was plunder. They were considered treacherous and dangerous, and were very troublesome to the miners generally.

"Savage and his Indian miners repulsed the attack and drove off the marauders, but from this occurrence he no longer deemed the location desirable. Being fully aware of the murderous propensities of his assailants, he removed to Mariposa creek, not far from the junction of the Aqua Fria, and near the site of the Old Stone Fort."

The Mariposa creek station and one on the Fresno were later attacked and several attendants killed. These depredations were the culminating events which precipitated the Indian war and brought about the discovery of Yosemite valley. But the earlier affair on the South Fork of the Merced was, quite evidently, the beginning of hostilities so far as Savage was concerned. Today a half million people annually hurry by the mouth of the South Fork of the Merced, in their Yosemite-bound motor cars. An appropriate marker placed on the All-Year Yosemite highway at or near the bridge over the South Fork would serve to remind us of those picturesque pioneer days and would perpetuate the name of James D. Savage, who commanded the Mariposa Battalion in its discovery of Yosemite valley.
CALIFORNIA'S STATE BIRD

By C. P. Russell

The California poppy is our State flower, the Sequoia gigantea is sponsored by the American Green Cross for our State tree, our State flag carries a figure of the extinct California grizzly bear, and now a state-wide campaign is announced for the election of an official State bird.

Organization and individual votes are to be recognized by the State bird committee of the California Audubon Society. California members of the Yosemite Natural History Association are urged to make their favorite birds known to Mrs. F. T. Bicknell, California Audubon Society, 319 South Normandie Avenue, Los Angeles, Calif.

In making a choice of a bird typical of the Golden State we should avoid the possibility of some time finding that bird threatened with extermination. Californians long ago destroyed the last of the magnificent grizzly bears which were once sufficiently typical of our mountains and plains to be chosen as the emblem for our State flag. Now, the last representative of the bear family, the black bear, is legally slaughtered in unlimited numbers, and at all seasons. California gives no protection whatever to the bear, one of her most interesting mammals. The official bird should be one that is at all times protected by State laws; one that breeds in California, and is known for its plumage, song, friendly nature, or valuable habits of living; one that is loved throughout the State by the public.

Bluebird, Symbol of Happiness

This voter has already voiced his preference for the Western bluebird. It has long been known as a symbol of happiness and has been eulogized in prose and song until it is loved by all. Most certainly California is a State of happiness, and no bird that we might select will convey more significant thought to citizens of other commonwealths.

At one season or another the bluebird is found on California heights and in our lowlands. Its pleasing habits and manner are above reproach which guarantee safety from lax lawmakers and gunners. It is truly as characteristic as some of the candidates that now head the list, and to my notion much more pleasing.

Other birds that have been suggested follow:

California quail, California woodpecker, Red-shafted flicker, Anna hummingbird, Bullock oriole, Green-backed goldfinch, California brown towhee, California thrasher, Canyon wren, Wren-tit, California condor, Desert sparrow hawk, Road-runner. Western kingbird, California purple finch, Black-headed grosbeak, Western tanager, Audubon warbler, Water ouzel, Russet-backed thrush, Bush-tit.

School Teachers May Aid Campaign

The campaign will not terminate until the end of 1928. School teachers may do much for ornithology by using this opportunity to interest their pupils in birds.
ACCESSIONS IN FEBRUARY

By C. P. Russell

Mrs. C. W. Hill, daughter of the artist, Thomas Hill, has presented booklets, "The Last Spike" and "Catalog of Paintings by Thomas Hill," as well as numerous news clippings pertaining to the artist's life and death.

A photograph of Markess Hedges, builder of the Cosmopolitan House in 1870, was donated by H. B. Hedges. Mr. Hedges also gave a photo of George Munroe, noted colored driver of early Yosemite stages.

W. A. Chalfant gave copies of his historical books, "The Story of Inyo" and "Outposts of Civilization."

G. E. Reynolds added to our series of splendidly bound "Out-o-Door Section" of the Stockton Record by presenting a file of the 1927 numbers. It is bound uniformly with the volumes of the four preceding years possessed by the museum.

A photostatic copy of map of Lake mining district (Mammoth), Mono county, California, was presented by Francis P. Farquhar. This rare map is useful in studying the history of the region east of Yosemite.

The Yosemite Natural History Association presented the following historical books:

- "Deck and Port," by W. Colton, 1886.

F. W. Schlageter of Mariposa gave the following valuable photographs pertaining to the history of the Yosemite region:

Mariposa Brass Band that accompanied President Grant to Yosemite in 1879.

Stereoscopic view of Mariposa Catholic Church and Mariposa mine.

Stereoscopic view by C. Bierstadt, placer mining by Chinamen.

Stereoscopic view, Rock Cottage in Yosemite.

Stereoscopic view, Yosemite Falls.

Stereoscopic view, cutting section of Sequoia in Calaveras Grove, for 1876 Centennial, Philadelphia.

Photograph of Frank Kinney of Yosemite's "Kinneyville."

Photograph of Thomas Lind, Yosemite guide, at Stoneman House.

Photograph of Cook's Hotel (originally Black's Hotel) of Yosemite.


Photograph of "Pike" and James Laurence, who killed "Bush-Head Tom."

Photograph of Mariposa county officials, 1887.

Photograph of Mariposa Hotel and crowd of Mariposans, 1887.

Photograph of Galen Clark at Wawona Tree tunnel.

Photograph of Washburn brothers, Galen Clark and others in Mariposa Grove.

In addition to these photographs Mr. Schlageter gave a copy of Hartwell & Mitchell's "Yosemite Valley," 1893. Two exceedingly rare and valuable watercolor paintings made in Mariposa in 1859 were lent for our use. One of these is a large painting of the Mariposa Hotel, which was operated by Mr. Schlageter's father, Herman Schlageter in 1855. The hotel has been possessed by the Schlageters through these years, and is still a landmark of Mariposa. The second painting is a large general view of the town of Mariposa as it appeared in 1859. Both of these paintings are said to have been made by A. Schwartz, and they are much more interesting than these few words might lead one to believe.

George E. Lind, county treasurer of Mariposa county, has presented a Watkins portrait of Galen Clark and two watercolor paintings signed A. Schwartz, Mariposa, 1859. One of these is an "Inside view of shaft No. 1 of Ben Mocke and Seale's section of the Mariposa vein. A pocket of $26,000 was struck here on the 14th of July, 1859, at a depth of forty feet, by F. Howell and Lind brothers, working said shaft on shares." The second colored drawing is mutilated, but is entitled "Outside view of shaft of Ben Mocke and Seale's section of the Mariposa vein. A pocket of $26,000 was struck here on the 14th of July, 1859, at a depth of forty feet by F. Howell and Lind brothers, working said shaft on shares."
Dear Friend:

Here are three good reasons why you should become a member of the Yosemite Natural History Association:

1. It will keep you in touch with Yosemite through "Yosemite Nature Notes".

2. It offers you opportunity to secure NATURE MAGAZINE, AMERICAN FORESTS AND FOREST LIFE, or both, at an unprecedented low price.

3. You materially aid a non-profiting Government educational activity (The Yosemite Museum and its attendant nature guide service) when you remit your membership fee.

Please read a sample of "Yosemite Nature Notes", consider our purposes, and don't overlook the benefits of the combination offers with the American Nature Association and the American Forestry Association. Remit by check or money order.

Cordially yours,

C. P. Russell
Park Naturalist