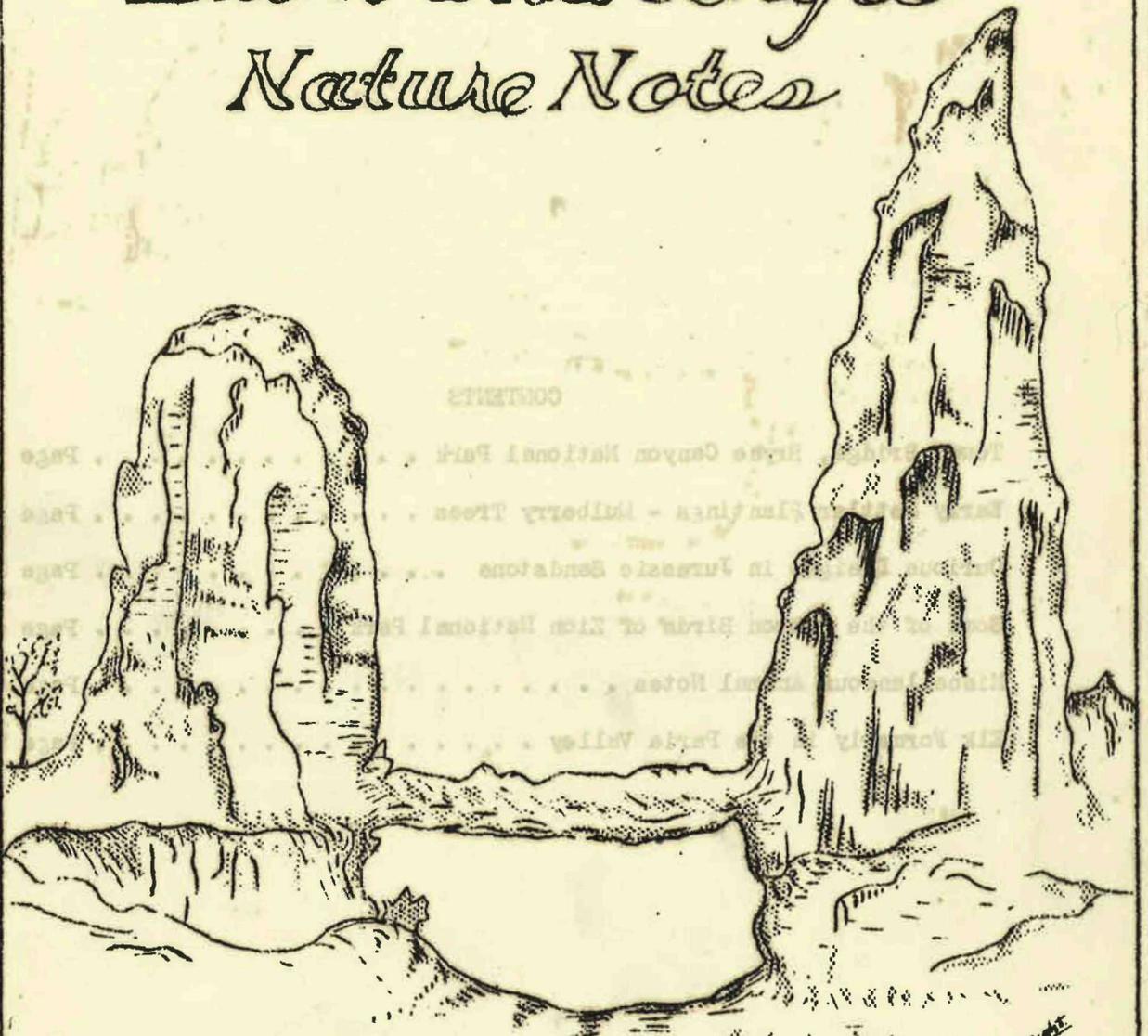


Zion and Bryce Nature Notes



TOWER BRIDGE of BRYCE Canyon. *W. H. H.*

Vol. IV

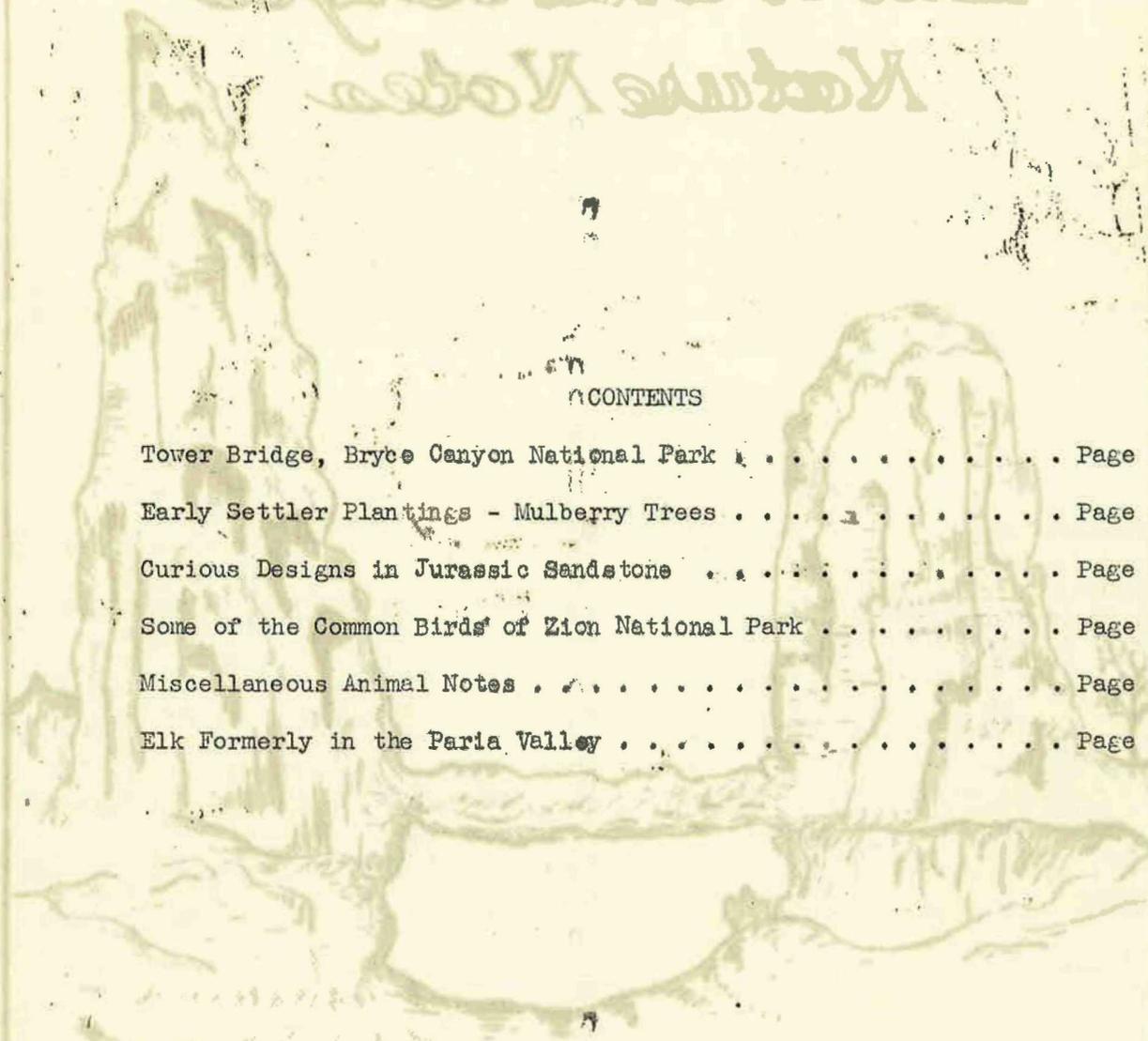
No. 3

June, 32

Zion and Bryce
Nature Notes

CONTENTS

Tower Bridge, Bryce Canyon National Park Page 1
Early Settler Plantings - Mulberry Trees Page 1
Curious Designs in Jurassic Sandstone Page 3
Some of the Common Birds of Zion National Park Page 4
Miscellaneous Animal Notes Page 6
Elk Formerly in the Paria Valley Page 7



Tower Bridge of Bryce Canyon

1907

Vol. 1

No. 1

U. S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
ZION AND BRYCE CANYON NATIONAL PARKS, UTAH

Vol. 4.
Zion-Bryce Nature Notes

No. 3
June, 1932

This bulletin is issued monthly for the purpose of giving information to those interested in the natural history and scientific features of Zion and Bryce Canyon National Parks. Additional copies of these bulletins may be obtained free of charge by those who can make use of them by addressing the Superintendent, Zion National Park, Utah. PUBLICATIONS USING THESE NOTES SHOULD GIVE CREDIT TO ZION-BRYCE NATURE NOTES.

P. P. Patraw, Superintendent

John Gray, Park Naturalist

TOWER BRIDGE, BRYCE CANYON NATIONAL PARK
K. E. Wight, Ranger-Naturalist

Bryce Canyon National Park has several natural bridges, but none is more striking than Tower Bridge, located in Campbell Canyon. It was named after the famous Tower Bridge across the Thames River near the historic Tower of London. Its location in the canyon also suggests the approach to some medieval castle.

The bridge is the result of the combined action of rain-water, wind and frost. These agents have been working for years carving out the softer layers of limestone rock that were at one time above and below the hard stratum that still remains. The towers on each side have withstood the chiseling action of the agents of erosion and they are still able to support the tons of rock material between them.

A visit to Bryce Canyon National Park is not complete until one has seen this unique carving of limestone rock by the forces of Nature.

EARLY SETTLER PLANTINGS - MULBERRY TREES
A. M. Woodbury, Ranger-Naturalist

A remnant of early settler plantings - a mulberry tree - stands beside the Lower Emerald Pool Trail just opposite the Lodge. It is a reminder of a wide-spread movement throughout the Dixie country below Zion to raise silk in pioneer times.

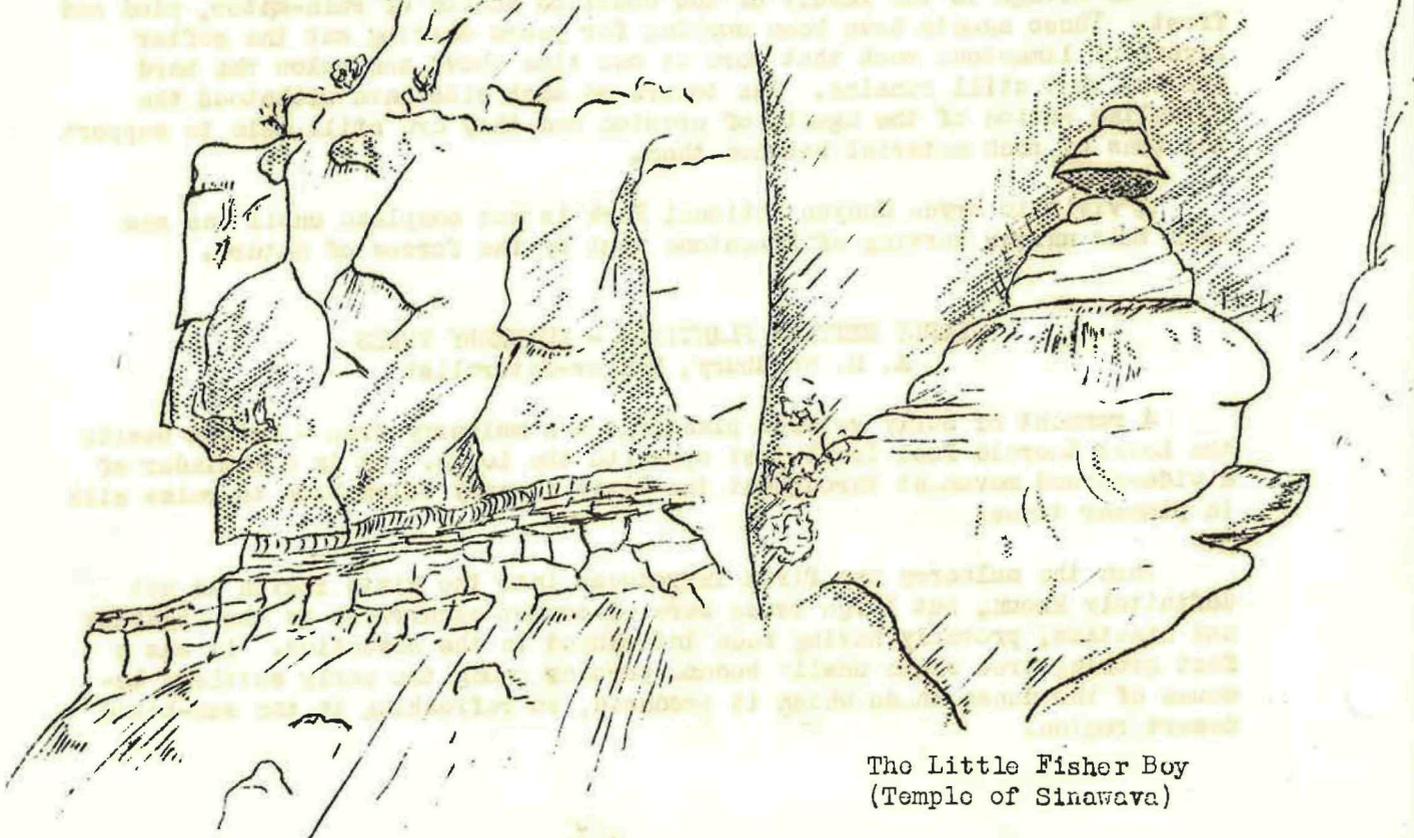
When the mulberry was first introduced into the Dixie region is not definitely known, but large trees were of common occurrence in the eighties and nineties, probably having been introduced in the seventies. It was a fast growing tree which easily became popular among the early settlers because of the dense shade which it produced, so refreshing in the sun-baked desert region.

But the tree had one undesirable drawback - it produced many berries which fell off and littered the ground. They were of two kinds, black and white, and both were of mediocre value as a human food. A Mormon missionary from St. George (George Jarvis) returning home from England in the late eighties brought with him a superior black variety that is exceedingly palatable to the taste. This black variety was planted in various places and today there are some large trees yielding delicious berries much sought after, not only by travelers passing through the country, but also by certain epicurean birds such as the Mocking Bird and the Bullock Oriole.

The extensive plantings of mulberry throughout the region as far up as the river as Rockville and Springdale, yielding large quantities of leaves, was probably responsible for the suggestion that silk might be raised to advantage. In those days when the people of the region had to be practically self-supporting and when the local cotton mill produced all available clothing, the idea that silk production would add to the conveniences and refinements of home life seems to have taken root.

Silk worms were introduced, cocoons were produced and silk cloth manufactured by hand, enough to prove that it could be done. The industry never flourished, however, and after fifteen or twenty years of sporadic efforts, it was finally abandoned.

As one rides along the highway approaching Zion Canyon from the west, the street of Rockville, five miles from the entrance, lined with large shade-giving mulberry trees, is a reminder of the pioneer efforts. The lone tree in the park stands on the bank of the river where it will soon be undermined and washed away. It is the last remaining vestige within the park of the old settler plantings of the mulberry.



The Great Sphinx
(Near South Entrance)

The Little Fisher Boy
(Temple of Sinawava)

CURIOUS DESIGNS IN JURASSIC SANDSTONE

The huge Jurassic cliffs in Zion Canyon are composed principally of Navajo Sandstone. The lower 1,600 feet is vermilion in color, the middle 800 consists of white, and a cap of 100 feet of red and vermilion surmounts the highest points.

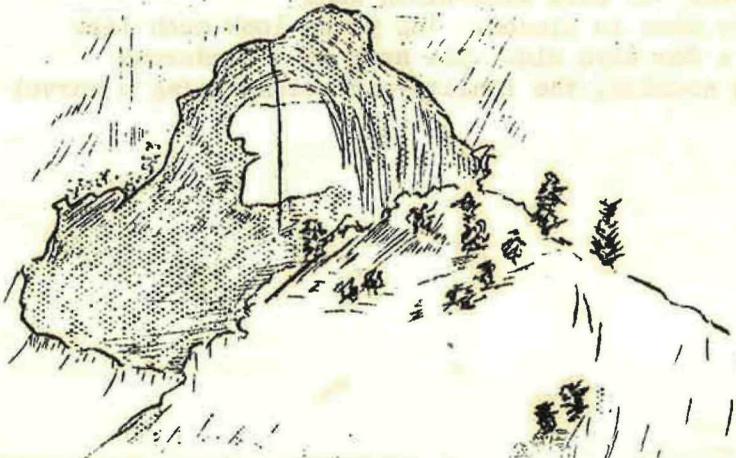
The lower Navajo or Vermilion Cliff is cut by many and devious joints and fractures. The seepage of water through the rock, with the assistance of frost, rain and side canyon streams, has caused many of the weaker ledges of cemented rock to loosen and fall out. Arches, buttresses, open cracks, huge smooth surfaces, overhanging ledges and ridges typify this formation.

Wind-blown sand has played its part in smoothing out many of the rougher fractures and surfaces. High on the Vermilion Cliff in the Temple of Sinawava sits a "Little Fisher Boy." Carved in stone, he sits there in his big straw hat fishing through countless periods of time, oblivious to the gaze of the many visitors.

High on the walls of West Temple appears the face of an Indian. The rains of many centuries have washed out the red cementing substances from the overlying cap of red. Those oxides of iron have streaked the face and hair. Early Indian inhabitants saw this face and named the cliff the Altar of Sacrifice, and always left an offering from the hunt at the foot of the cliff. Thus nature helped to produce legends with a primitive people, but modern man is interested and awed when he gazes up at this sinister face streaked with its dripping red from upper cliffs.

Just below the Vermilion Cliff lies a huge ledge of dull red block-like sandstone known by the geologist as the Upper Chinle, a deposit of the Jurassic age. Vertical and horizontal fractures have split this ledge into many large cubes, rectangles and various shaped blocks. Thin layers of shale, gypsum and mud rock underly the larger sandstone blocks and erode easily with wind and water. At the entrance to Oak Creek near the foot of the Altar of Sacrifice stands the Great Sphinx Head, like a guardian to the south entrance of the park and a symbol of the vast age of the rocks of Zion.

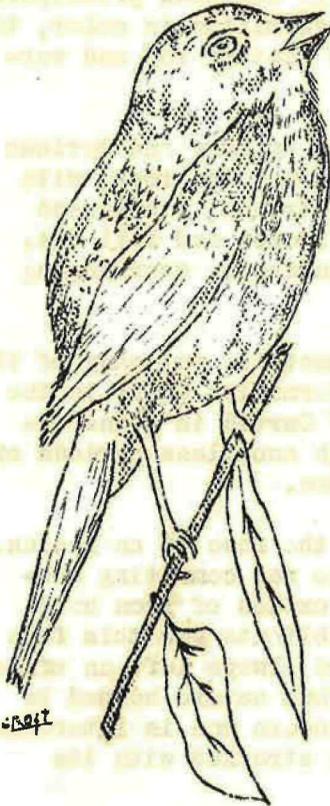
More curious designs next time.



The Indian Head
(West Temple)

SOME OF THE COMMON BIRDS OF ZION NATIONAL PARK
Gordon Y. Croft, Ranger-Naturalist

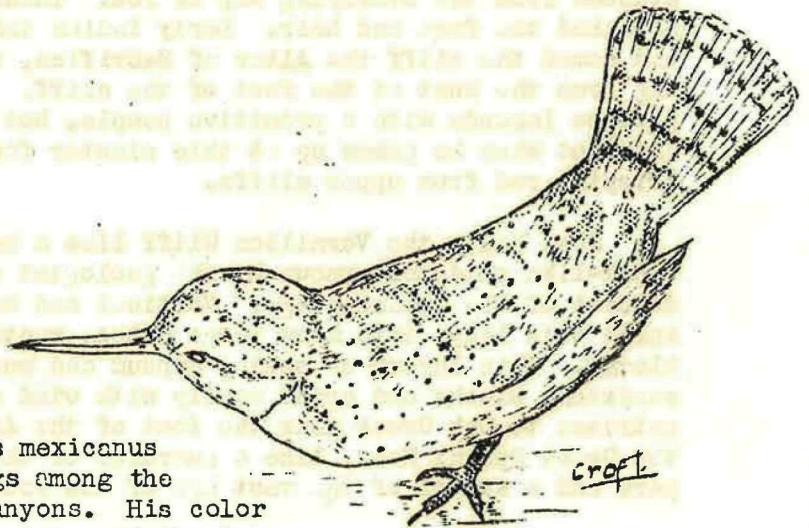
Desert Song Sparrow



The Desert Song Sparrow (*Melospiza melodia fallax*) is somewhat smaller and of a lighter color than its near relative, the Eastern Song Sparrow.

It is quite abundant in Zion National Park and can be heard any morning on the Narrows nature trail. One bird in particular lives in the cottonwood trees growing around watercress spring and nearly every morning greets the morning hikers with his familiar song.

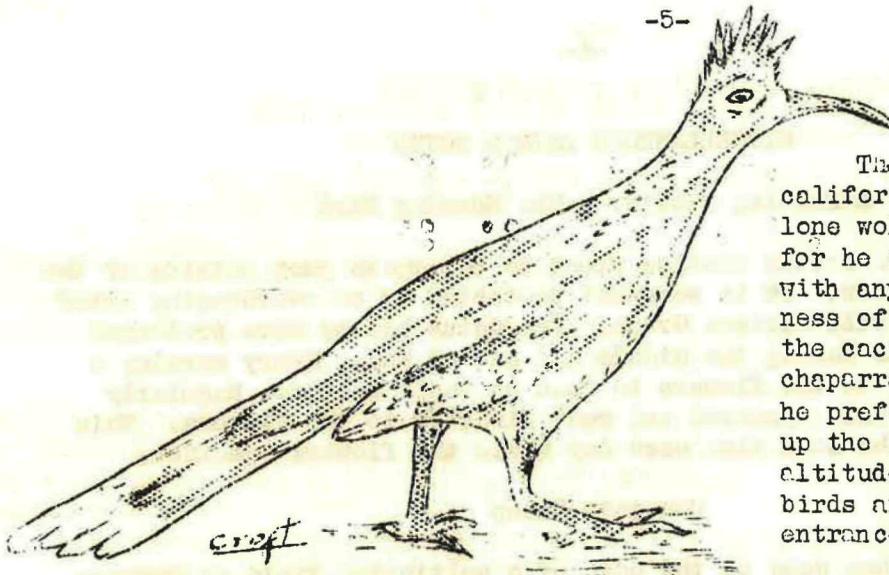
The heavily spotted breast with the heavy central blotch which is so characteristic of this bird shows up very plainly in this lighter colored species.



Canyon Wren

This Wren (*Catherpes mexicanus conspersus*) really belongs among the rocks and crags of the canyons. His color blends with the dark sandstones of the lower regions of Zion Canyon. In dark wind-blown sand holes the nest of dry moss is placed. The young look much like the parent when but a few days old. The song is a wonderful exhibition of joyous abandon, the quality and volume being a marvel to the listener.

Road Runner

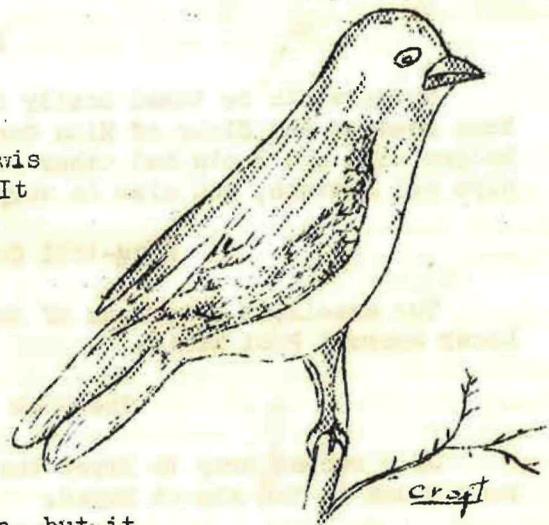


The Road Runner (*Geococcyx californianus*) may be called the lone wolf of the bird family for he is never seen in company with any of his kind. His swiftness of foot is well known in the cactus-covered desert and the chaparral of the foothills, which he prefers, but he sometimes comes up the canyon to the higher altitudes. Several of these birds are seen daily at the south entrance to Zion.

His appetite is voracious; lizards, large beetles, centepodes, grasshoppers, mice and even rattlesnakes fall before the combined attack of his stout claws and bill. Unfortunately this curious bird is becoming scarce due to the extension of farming into its desert habitat.

Western Tanager

The Western Tanager (*Piranga ludoviciana*) one of the most familiar of western birds, was discovered by Lewis and Clark in northern Idaho in 1806. It is much at home among the pine woods of the higher elevations, although a frequent visitor to the lowlands in the early spring months. Its habits are similar to its scarlet cousin, and it also has a sweet song similar in general effect. It feeds on beetles, wood borers and other insects, but is very fond of cherries from which it has acquired somewhat of an evil reputation, but it prefers the wild ones when they are at hand.



MISCELLANEOUS ANIMAL NOTES

A Morning Visitor - The Humming Bird

A pin-cushion cactus nestles close to the rocks just outside of the Museum office window. It is somewhat protected by an overhanging arbor of hackberry and wild Mexican Grape. The cactus blooms were prolonged over several weeks during the middle and end of May. Every morning a humming bird came to the flowers to feed on their nectar. Regularly at 8:20 A.M. the bird appeared and went directly to the flowers. This was repeated at the same time each day while the flowers remained.

Mountain Sheep

A large ram was seen on the edge of a cultivated field at Springdale during last days of May. A fairly large herd inhabits Bridge Mountain at the south entrance to the park, but they are very shy and only a few people have seen them.

Porcupine

Several porcupines have been seen recently crossing the road at night. Young animals will learn to feed by hand, but neither young nor old are successfully tamed. The 1932 windshield sticker for Zion bears the figure of a porcupine.

Badger

Badgers can be tamed easily if taken when fairly young. Several have been seen on the floor of Zion Canyon during the past two weeks. The badger will eat roots and other vegetable material such as carrots, turnips and lettuce, and also is very fond of bread and milk and raw meat.

Ring-tail Cat (or Civit Cat)

Two excellent specimens of this animal have been seen recently on the Lower Emerald Pool Trail.

The Rock Chuck at Bryce

On a recent trip to Bryce the Superintendent and Naturalist saw a large rock chuck on the rim at Bryce.

ELK FORMERLY IN THE PARIA VALLEY
Ranger Maurice Cope

Paria Valley is part of the great Kaiparowits Region. Paria River has its confluence with the Colorado at old Leo's Ferry, three miles above the new steel bridge which spans Marble Canyon. Thirteen creeks along the east slope of Bryce Canyon National Park are tributaries forming the headwaters of this river, together with a few creeks coming in from the east side of the valley.

Two years ago I was sitting upon Inspiration Point with A. W. Ivins, an early Utah pioneer, Indian scout, and one who has had a great deal of experience in southern Utah and northern Arizona. He informed me that the word Paria was an Indian name meaning Elk Waters, and that the Indians understood that elk once ranged along the banks of the Paria River, its tributaries and over Bryce Canyon.

Since my conversation with Mr. Ivins I have been anxious to verify the fact that elk once roamed the Paria Valley. During the past winter I discussed this with Ammon Davis, a prominent sheep man, trapper, explorer and cougar hunter now living at Cannonville, Utah. He informed me that he had found in Willis Creek, just below the national park boundary line, part of the head and horns of a bull elk, and he promised me that I should have them as part of the park museum collection, as something to remember of the herds of elk that once roamed the Paria Valley and Bryce Canyon.

