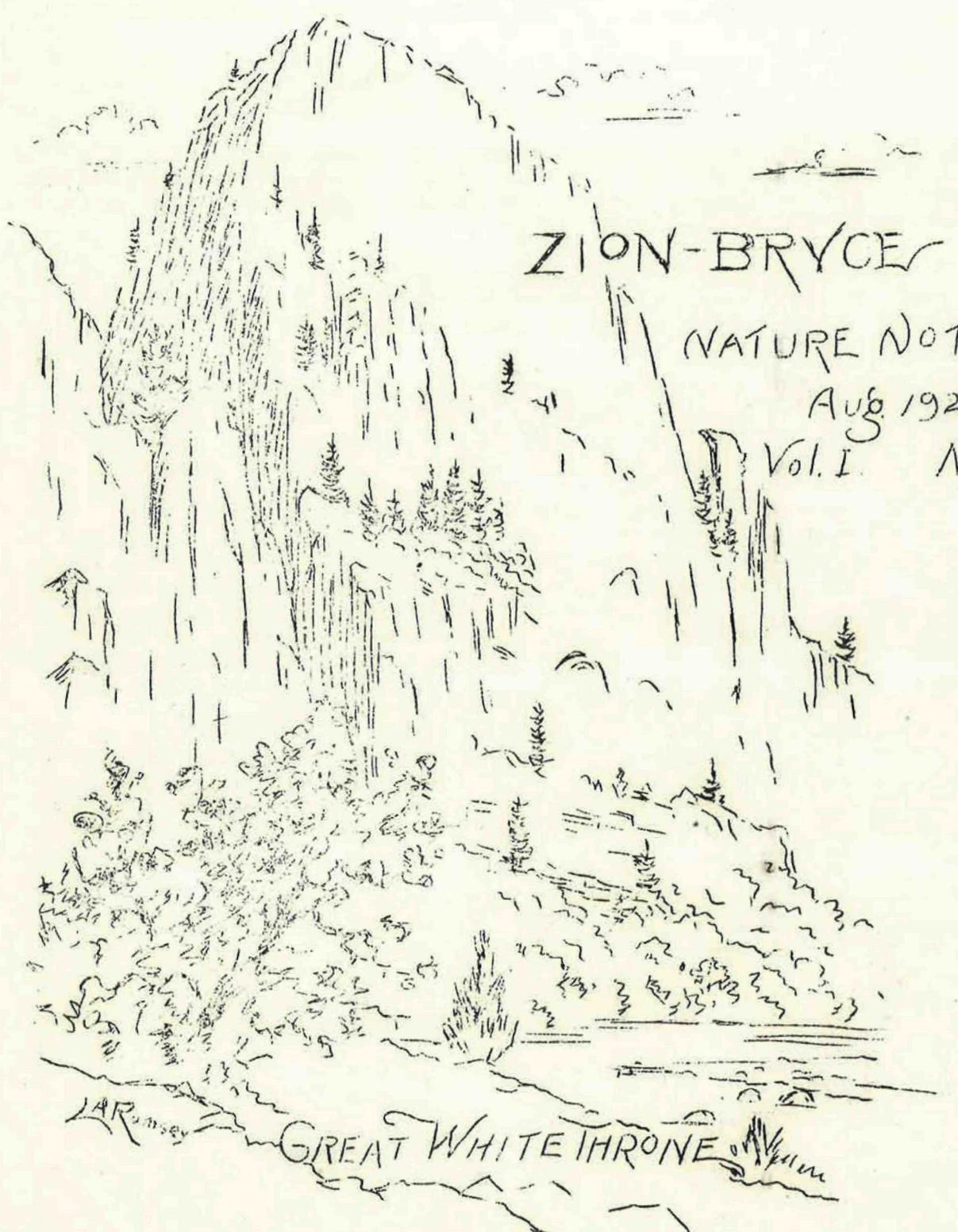


Bill Godfrey



ZION-BRYCE

NATURE NOTES

Aug. 1929.

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LAR Ramsey

GREAT WHITE THRONE

Department of the Interior
National Park Service,
Zion and Bryce Canyon National Parks, Utah.

ZION AND BRYCE CANYON NATURE NOTES

August 1, 1929

Vol. I. No. 1.

This is the first of a series of bulletins to be issued from time to time for the information of those interested in the educational opportunities, the natural history, the scientific features or the scenic beauties of this region. PUBLICATIONS USING THESE NOTES, PLEASE GIVE CREDIT TO "ZION-BRYCE CANYON NATURE NOTES" AND AUTHOR.

E. T. Scayen,
Superintendent

A. M. Woodbury,
Park Naturalist

INTRODUCING
ZION AND BRYCE CANYON NATURE NOTES.
By E. T. Scayen, Superintendent

That the National Parks can best serve the American people from the standpoint of their educational value, has long been recognized by the National Park Service. As early as 1918 we find references in reports of our bureau to the "recreational, inspirational and educational uses of the parks". It is not, perhaps, at all inaccurate to state that at this time, recreation was considered the most important of the three. However, today it is a well recognized fact that areas which have abundant recreational resources, may lack what we now consider the most essential elements for a park; their possession of features so outstanding that they are a source of inspiration to those who visit them, and which we plainly indicate a great story of nature that each visitor is moved to broaden his understanding of Nature, and thereby form the basis of a deeper understanding of the Creator and the forces by which he accomplishes his ends. In other words the inspirational and educational uses are now of overwhelming importance.

The most important word in the vocabulary of any National Park Service employee is "Protection". It may seem far-fetched to claim that in carrying out our educational program we are taking a most effective means of making the protection of the parks easier of accomplishment. However, an appreciation of nature also involves an appreciation of beauty. Any sane person has a deep reverence for things which he believes to be beautiful, and the surest way to protect a flower, tree, waterfall, mountain or a park, is to educate our citizens in such a manner that they become conscious of the beauty of the object, thereby eliminating all desire for destruction, and creating an ardent protectionist at the same time.

For several years we have been carrying on educational work in Zion National Park. This year we have also made a start in Bryce

Canyon. The Educational Plan for the National Park Service lists a number of activities which should be carried on in order to provide adequate educational facilities for park visitors. Due to lack of personnel, we are not able to maintain a full program. However, we wish to present at this time our first issue of "Nature Notes" which is a step forward in our development. This little publication is not intended as a technical journal on the scientific features of the park, but is merely to convey interesting information on any park subject to the public. The articles have been and will be prepared by members of the park force, and every effort will be made to see that all data published is scientifically accurate. We sincerely hope that our efforts will in at least a small way contribute towards an attitude of nature appreciation on the part of those who may read it.

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HOW TO REACH ZION NATIONAL PARK

Zion National Park is reached from either Cedar City, Utah, on the Union Pacific System, or Marysvale, Utah, on the Denver & Rio Grande Western Railroad. From these points motor-stage service is provided by the Utah Parks Company.

Motorists along the Arrowhead trail, U. S. No. 91, from Los Angeles to Salt Lake City can reach Zion Park by turning off the main road at Anderson's Ranch and going east.

An excellent road has been completed from the park entrance to the Temple of Sinowava, a distance of seven and one half miles.

Approximately 26 miles of trails lead to the most important points in the park. These trails are well maintained and can be used at all seasons of the year. Horse trails lead from the floor of the Canyon to the East and West Rims, so that it may be viewed both from the top and from the bottom.

HOW TO REACH BRYCE CANYON NATIONAL PARK

In order to reach Bryce Canyon, private motorists should leave the main highway, U. S. No. 89, about four miles south of the town of Panguitch. Turning to the east the road follows up Red Canyon, a brilliantly colored little gorge which is often mistaken for Bryce Canyon itself. The approach to Bryce Canyon is spectacular; no evidence of the canyon is visible until the road ends suddenly on the rim and reveals the great sight in all its breath-taking beauty.

Travelers by rail may reach the park over the Union Pacific System from Salt Lake City to Cedar City, Utah, thence by motor bus to Bryce Canyon.

KING SNAKE EATS A RATTLE SNAKE.

By Harold Russell, Park Ranger.

For a long time we have been led to believe that the boyle king snake (*Lampropeltis getulus boylei*) preyed upon rattlesnakes (*Crotalus oreganus*) but it was on July sixth that we first obtained the definite evidence. It was on that date that a small rattlesnake was dropped into the cage where three small king snakes were kept.

The king snakes which appeared to be sleeping immediately sensed the presence of a stranger and one of them became alert and active. The rattler coiled up in the corner of the cage apparently much frightened while the king snake approached and took a stand directly in front, bracing itself against the screen wire on the side of the cage and forming a U a few inches back of the head. Cautiously it moved nearer the prey until within striking distance when it suddenly straightened out its U and grabbed the rattler by the snout thus holding its mouth shut. The rattler squirmed and twisted but all to no avail. Placing one part of its body over the rattler the king snake pulled on its head and stretched the victim out until you would think the bones would pull apart. This had a quieting effect on the prey and the captor began slowly but surely to swallow the other, head foremost as most snakes do when devouring their prey.

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THE BOYLE KING SNAKE TAKES A MEAL.

By J. W. Thornton, Ranger Naturalist.

Yes that king snake was hungry and lost no time in getting ready for action when the gopher snake was introduced into his apartment de luxe which he occupied in Reptile Row. He seemed to realize that his visitor was not his hated adversary, the rattler and showed less caution in his attack. He came upon the gopher snake and clamped his jaws on his body about two-thirds of the way down. Then he wrapt his body around the gopher snake in a series of twists that would make the hammer lock and the toe hold beautiful dreams in comparison. After thus getting the gopher snake securely hold he let loose the hold that he had first taken with his mouth and began moving cautiously up towards the head but the gopher snake was too wise to let him get a chance to get his head in his mouth. Failing in this attempt he again clamped his jaws on the other's body about six inches from the head. Then he started slowly to make his way towards the head by loosening one side of his jaw at a time and moving it up while holding with the other side. This he did until the head was reached. The gopher snake realizing that the end was approaching opened his mouth as wide as he could so that the king snake could not get hold of his head. But the king was king of the situation. He worked his mouth over the top of the others head and closed his jaws. By this time he had wrapped his body around the gopher snake about four inches below the head. Now he began pulling and twisting. You could see the gopher snake stretch out. After having twisted the poor gopher snake like a hair rope he released the hold that his teeth had taken on the inside of the king snake's mouth and the whole head soon disappeared. It was then but a question of a few minutes until the king snake had finished his dinner and crawled under the rock for his daily beauty sleep.

A RACE RUNNER LIZARD "THROWS" ITS TAIL.

By A. M. Woodbury, Park Naturalist.

That lizards deliberately throw their tails on occasion and leave them wriggling in your hand to attract your attention while they escape has been abundantly proved, but a new variation occurred on July first. Dr. Stork and I were sitting on the bridge by Weeping Rock when one of the Striped Racerunner lizards (*Onemidophorus gularis*) came dashing up into the sand at our feet with what appeared to be a long slender tail stretching out three or four feet behind. In reality, it was a Striped Racer snake (*Masticphis t. taeniatus*) a-hold of the lizard's tail.

Neither one paid any attention to us, and in the scuffle that ensued, the lizard "threw" its tail and left it wriggling in the snake's mouth to be deliberately swallowed while the lizard proved its name Race-runner in scampering to safety.

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A DEER SLIDE.

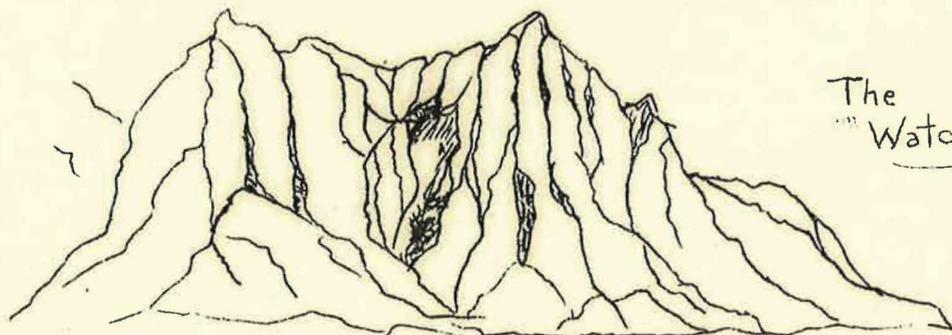
By A. M. Woodbury, Park Naturalist.

That deer are agile, athletic and able to take care of themselves under strenuous conditions was amply illustrated a short time ago along the East Rim trail.

Climbing the lower part of the trail, Ranger Critchlow and I saw on the side of the precipitous slope three or four switchbacks above us a deer running back and forth as though disturbed by something from above, and evidently trying to find a way down. While watching, it came down through an open stand of oak and service-berry growing on the talus above a sloping cliff perhaps thirty or forty feet high.

As it came to the lower edge of the brush, the sand under foot gave way and the deer began to slide down the slick-rock of the cliff. Evidently much frightened, it braced itself for the event and spread its four legs out in different directions to keep its balance. Thus braced it slid easily down the rock where it plunged into the soft sand at the bottom and walked off unconcernedly.

This incident may help to explain a previous accident. In 1925, a deer was found dead on one of the trails. The bruises and abrasions in the hide indicated that it had fallen off the cliff above and made me wonder how it happened. Undoubtedly it must have slipped and fallen.



The
"Watchman,"

FIRE-CAUSED-BY ROCK SLIDE.

By A. M. Woodbury, Park Naturalist.

A new method of starting forest fires was discovered recently by R. T. Evans of the U. S. Geological Survey. As Mr. Evans was mapping near Oak Creek, a small slide of rock came rolling down the slope across a small canyon opposite him. As he stood watching the rolling rocks and dust clear away, a small tree (probably Utah Juniper) burst into flames near the foot of the slide and started a small forest fire in the brush and scrub timber.

Just how the tree became ignited is a matter of conjecture. The slide occurred on a south exposure near mid-after-noon when the sun was pouring its burning rays down among the scanty vegetation. Most everything was hot and dry, ready to burst into flames at the slightest provocation. The bark of the juniper is soft and shreddy and makes an excellent tinder. The spark may have been generated, according to Mr. Evans, in either one of two ways: By rocks striking together or by friction of a rock rubbing past the combustible bark. In either case, it would be but a few moments until the bark would be ablaze.

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INSECTS DEFOLIATE ASH TREES.

By A. M. Woodbury, Park Naturalist.

The ash trees of Zion suffered a severe plague of caterpillars during May of this year. The plague was so severe that by the first of June when the Naturalist arrived, practically every tree in the Canyon had been completely defoliated. The caterpillars had finished their work and gone into pupation.

The effect on the ash trees was anxiously awaited. For a while it was feared that many of the trees would be killed, but finally the buds began to swell and tiny tips of green soon heralded the forthcoming foliage. It is remarkable the way the trees responded to the shock.

A similar but less severe plague occurred about 1923. At that time, certain control measures were resorted to which probably lessened the intensity of the damage.

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DEER KILLED BY TICKS OR MITES.

By Harold Russell, Park Ranger.

A motorist reported a dead deer by the side of the road. Naturally I hastened to the scene wondering what could have been responsible for its death. I found a five-pointed buck, poor and scrawny, greatly emaciated. Close examination revealed myriads of mites swarming over the body and many large ticks which had eaten their way through the hide and penetrated the flesh. The hair lacked luster and appeared to be dead.

Undoubtedly the ticks and mites were responsible for its death, the ticks probably taking the greater part of the responsibility.