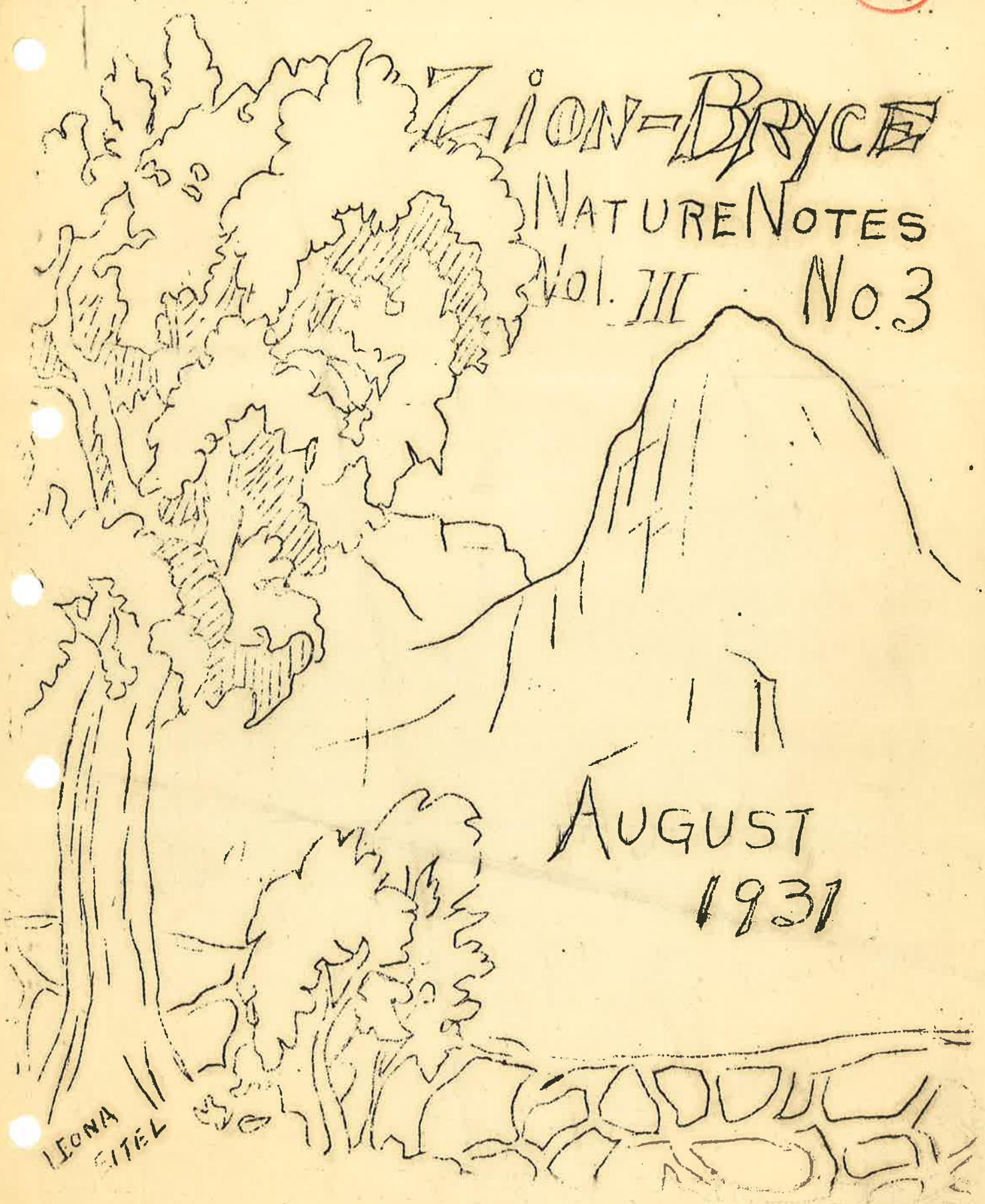




ZION-BRYCE  
NATURE NOTES  
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ZION-BRYCE NATURE NOTES

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This series of bulletins is issued from time to time during the summer 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 SHOULD GIVE CREDIT TO ZION-BRYCE NATURE NOTES & AUTHOR

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ANOTHER PEAK CLIMBED

By J. W. Thornton, Ranger-Naturalist

On Saturday, August 15, 1931, another of the Zion peaks was climbed. Walter Becker, Fritz Becker and Rudolph Weidner from Newark, New Jersey, climbed Cathedral Mountain and planted the foot of man on another piece of virgin territory. This is the second peak to be climbed this season. On June thirtieth of this year Don Orcutt of Los Angeles, California, climbed the Great White Throne. He established the record of being the first man to mount that spectacular peak and return safely to the floor of the canyon on his own power. Again a record has been made and the home of the spirits has been invaded.

The boys left camp at 6 o'clock A.M. and were on top of the peak at twelve. They encountered some difficult climbing near the top. After mounting a "chimney" for approximately one hundred fifty feet they encountered an overhanging rock which taxed all their powers of ingenuity and endurance to pass. Walter Becker, an experienced mountain climber from Germany, climbed over first and dropped a rope down for the other boys to hold to as they passed the perilous edge of the precipice. To have fallen here would have meant a sheer drop of one hundred fifty feet and had they not stopped there on a small shelf that stuck out from the wall of the canyon, they would have fallen until reaching the base of the cliff hundreds of feet below.

They rested on the top of the mountain for two hours before beginning the return trip. At five-fifteen o'clock they were back in camp.

Walter Becker, in speaking of the climb, pronounced it a rather hard one to make because of certain bad places to get over. These places were both difficult and dangerous. Difficult because of the overhanging cliffs and vertical walls, and dangerous because a false step or a loose rock meant death on the cliffs far below.

PIONEER WOMAN OUTWITS INDIAN  
By H. L. Reid, Ranger-Naturalist

In days that are now passed and partly forgotten, the Indians living within the region surrounding Zion National Park were a power to be reckoned with. Their demands, although at times unreasonable, could not be ignored with safety. To refuse their demands often meant to gain their ill will and thus invite their continuous opposition.

At the isolated ranches and farms the unscrupulous Indian would often appear and make demands for such property as horses, saddles and guns, and especially was he likely to make such demands if he by any chance learned that only the women and children were at home. Many times the women, being nervous and frightened, permitted the Indian to take property which did not belong to him. At other times, however, the women were able to outwit the Indian and he was beaten at his own game. The following is such a case.

Some thirty-five years ago John Dennett and wife, now of Rockville, were living on a ranch on Kolob, near the headwaters of Zion Canyon Creek. This ranch was some twenty miles from the Zion Canyon Lodge, and about ten miles from the nearest neighbor.

One evening while Mrs. Dennett and her children were alone at the ranch, an Indian from Coal Creek John's band near Cedar City appeared at the ranch. He looked about the place in silent Indian fashion, manifesting, however, special interest in the only horse left for use at the ranch. After a careful inspection of the place he returned to the house, from which Mrs. Dennett had been watching him. He insisted that the horse was his. Mrs. Dennett explained to him that her husband had just recently purchased the horse from a neighbor and that he (the Indian) was mistaken. The Indian, however, stoutly maintained that the pony belonged to him and that he expected to take it. With equal firmness Mrs. Dennett insisted that the horse was not his property and hence he could not have it.

Night was approaching and the Indian lingered about awaiting the shades of darkness that he might the more easily accomplish his purpose. Fully anticipating the Indian's plans, Mrs. Dennett, after milking the cows, sent the boys to bring the horse from the pasture. She took the horse and tied it securely to the door knob. The Indian carefully watched every movement, insisting continuously that the horse belonged to him and that he intended to take it. As he observed her tying it to the door knob an amused and half suppressed smile passed over his face. "Indian cut rope, take horse", he mused, half to himself.

After examining the knot to make sure that the horse was tied securely, Mrs. Dennett quietly stepped inside the house. The Indian was watching every movement. As she stepped within the house she took the gun from its accustomed place on the wall, and then seated herself near the door; that she might be able to observe every movement near the horse. Placing the gun across her lap, she quietly but firmly informed the Indian that if he attempted to take the horse she would shoot, and shoot to kill.

During the long hours of the night Mrs. Dennett remained on duty. For some hours the Indian could be heard prowling about, but realizing that within the cabin, into the darkness of which he could not see, sat Mrs. Dennett with the gun, and having considerable respect for her marksmanship, he did not venture near the horse.

As the light of morning dawned, Mrs. Dennett was still on guard, and the horse was still at the door, but the Indian was no where to be found.

#### DO ANIMALS REACT TO MUSIC?

By J. W. Thornton, Ranger-Naturalist

A rock squirrel (*Otospermophilus grammurus grammurus*) was making one of his regular daily visits to and around our camp. He was going through a lot of squirrel antics incident to his search for food, when one of our crowd began playing the ukelele. He stopped all activity and seemed to be listening intently. The rhythmic vibrations coming from the ukelele continued to fill the air. The squirrel left his position of wrapt attention as he sat on his haunches with his nose high in the air, and quietly made his way to a big cottonwood tree that was lying on the ground near by. Here he stretched himself out full length on his side and remained there perfectly motionless for nearly half an hour until the music from the ukelele ceased. Then he roused himself and slowly, as if he still were under the influence of the music, moved away. He did not stop to play nor had he any further thought of food. He had not yet forgotten the influence of the past half hour. The music it seemed had set up something in the squirrel that had crowded the natural instincts out for a time, and only after the passing of the spell did he again assume the role of food collector and gourmand of choice morsels taken from the camps of the tourists.

I have often heard stories from our visitors of the effect of music on animals. Only just the other day someone was telling about snakes being affected by strains of music. I have never had a chance to observe such a thing, but when I was a boy I used to play the harmonica and listen to my good dog friend accompany me with mournful wails and howls. If he stopped howling, he would sit or lay perfectly motionless until the music stopped. His favorite position when silent was to lie with his paws stretched in front of him, with his head quietly resting upon them. Thus this squirrel and dog, when under the influence of music, seemed to assume poses of complete abandonment.

## ARE FOSSILS BEING FORMED?

By J. W. Thornton, Ranger-Naturalist

In many places along the Narrows Trail water seeps from the wall. Everywhere that this running or seeping water is found, there occurs deposits of travertine limestone. Somewhere before this water reaches its present position on the wall it has passed through limestone beds where it has taken lime into solution because of the presence of  $\text{CO}_2$  in the water. This travertine may be deposited on the wall because of the presence of algae or by concentration or evaporation. In some places on the wall the deposits are larger. Some of these humps are still un-solidified and show the presence of much vegetable life. We possibly could expect a greater deposit of travertine here than elsewhere because of the presence of this plant life which takes the  $\text{CO}_2$  for its own uses and causes a precipitation of the lime.

In practically all of the places where the travertine is being deposited we find the same association of plants. Here we find the leaves and stems of the columbine (*Aquilegia thalictrifolia*) the monkey flower (*Mimulus moschatus* Dougl.) the maiden hair fern (*Adiantum pedatum aleuticum* Rupr.) and the cardinal flower (*Lobelia splendens*) being covered with these travertine deposits. If, after this covering has occurred, or during the process there is a slow decaying of the vegetable matter and a corresponding infiltration of this mineral into the decaying cells, we have a fossil in the state of formation in the same shape as that of the vegetable form. If there be an incrustation formed around any part of the plant which preserves the form even though there be no actual deposit within the cells of the decaying plant, there is a fossil being formed. In places along the sides of the Hanging Gardens it is not unusual to see moss covered with a light coating of travertine. When you feel this deposit on the plant you will notice that it is already hard. If this process continues for ages to come, that plant, now almost encrusted in mineral, will be entirely covered and a fossil will have been formed.

In the museum we have pieces of travertine that are full of fossil leaves. The past has made for us a record of fossil formation within the travertine found in this canyon that is unmistakable. From this evidence we can safely assume that fossils may be formed and if it has been done in the past, it may be going on now. Are fossils being formed?

THE CANYON WREN HUNTING  
By A. M. Woodbury, Park Naturalist

A Canyon Wren (*Catherpes mexicanus conspersus*) came into my tent-cabin through a small opening above the door. The first warning of its presence was its characteristic "tseep". I sat still and watched. Becoming accustomed to my presence, it went to work hunting, although it continually kept turning its head so it could keep an eye on me.

It flew to a spider web concealed between the tent and the board frame, The web belonging to one of those Agalind spiders which make those peculiar webs with funnels leading from the face of the web down into a crevice or protected place of retreat. In this case it led down into a crevice between the board and the frame-work to which it was nailed. The wren grasped the funnel of the web on its bill and pulled it up quickly. As it happens, the funnel of the web always has an opening in the end through which the spider can escape, and at the first movement of the web, the spider slipped out of the end and down through the crack in an effort to escape. Evidently the bird saw the spider as it slipped through the crack, for before the spider could run across the board to the nearest crack, the wren had flown around the framework and alighted on the vertical side of the board beside the running spider. As the spider sped toward a crack of refuge, away from the alighting bird, the wren's long bill followed its course in a direct-away thrust and grasped the running spider as it was on the brink of safety.

The wren dropped to the floor to eat the delicate morsel. A gulp or two failed to take it down the throat. A squeeze of the spider's body was followed by dropping it to the floor where it lay perfectly still. The bird picked it up again from a different angle and a couple of gulps took it into the mouth from whence it was swallowed.

This seemed to be only an appetizer, for the bird then started to hunt in every crack, cranny or crevice in the distant end of the building. It went to the batten on the door and followed it along as it peered into each crack behind it. Thrusting its bill down into a crack, it pulled out a spider web, keeping one eye peering into the crack as it did so. Evidently a spider moved for it dropped to the bottom of the batten and peered up the crack from below. It thrust in its long bill and cleaned out the web from below, but evidently could not reach the spider although it kept peering into the crack as if watching it in its place of refuge just beyond reach. How useful a longer bill would have been.

This bird evidently knew the ways of spiders for it went searching the crannies where the spider webs were likely to be concealed. Sometimes it found insects entangled in the webs. I saw it pick out several such insects but after sampling each one it was dropped. Undoubtedly they were just the "husks" of the insects that had been drained of life blood by the spiders. It is conceivable that once in a while the bird might thus find an insect freshly entrapped that had not yet been drained by the spider.

The canyon wren is primarily a cliff-dwelling bird and no doubt seeks most of its food among the cracks and crevices in the rocks. Spiders probably represent one of the most abundant forms of life upon the cliffs and it would not be surprising if they constitute a large part of the food supply. The crack-searching habits help to explain the presence of the long bill upon the canyon wren.

#### THE IRONY OF NATURE'S LAWS

By S. D. Durrant, Ranger-Naturalist

Nature seems sometimes to be just a trifle too hard. Many times the plan of it all is just a little different from what we would have it had we been the formulator. As I gaze around me the proof comes to me that in nature if you are not eating, you are being eaten.

One morning as I was working around the museum, my attention was arrested by what I saw. On the window sill just adjacent to the door of the building I beheld another of nature's tragedies. One form was eating another. The predator was the common Daddy-Long-Legs. We are all familiar with the long eight-legged creature. The victim was one of the small moths (*Catocla* sp?).

The Daddy-Long-Legs came scampering over the smooth board of the sill until he was close to the moth which was resting. Naturally the moth was at a disadvantage, being a nocturnal flyer. When the Daddy-Long-Legs was close he stopped like he was planning his attack. Then he just seemed to walk right over the unsuspecting moth. Thus suspended over his quarry, the body was lowered until the fangs were brought into play on the victim. The moth fluttered but was unable to break through the mesh of the legs, which were all around him like an octopus. With the fangs the predator then moved from one segmental joint to another. As a vulnerable spot was reached the process of filling his body with life juices of the other proceeded very rapidly. The moth struggled valiantly against such voracious onslaught, but with no avail. The struggle gradually grew weaker and weaker until death overtook the victim.

Proceeding from one segment to another until he had left only the empty hulk of the little grey moth, he then moved away. The body of this vampire was distended until it appeared to have reached the point of rupture. The last I saw of the creature was as he worked his way into the crack between the stones to hide and digest the copious meal.

BIRDS ALONG THE NARROW'S TRAIL  
By S.D. Durrant, Ranger-Naturalist

Many people have asked me where all the birds are as they proceed along the trail in the Narrows. Just because we do not see the birds as we go along the trails is no assurance that they are not present. I heard this complaint so often that I decided to investigate and see for my own satisfaction just how many birds I could see on this trail. One morning as I was proceeding up the trail with a party of tourists I pointed out the following birds.

Gazing up in the heavens from the end of the path by the fountain in the Temple of Sinawava, I saw an abundance of bird life. As my eyes reached the top of the Cottonwood trees, the first bird I saw was the Warbling Vireo. He was sitting on a branch singing just as lustily as possible. The song was so rich that you also thought that the world was a pretty good place. Then as my eyes sought the blue of the morning sky, many other forms caught my attention. Just above the trees, flying as they alone can fly, were the beautiful violet-green Swallows, who flitted here and there, planing one minute and soaring another, ever on the trail of some elusive insect. Higher in the sky on stronger pinions, and flying with much more velocity, but in search of the same prey, were those birds with the long rakish wings and white throat, the White-throated Swift. Then higher up, nearly at a level with the top of the precipitous cliffs were those large red-headed carrion eaters, the Turkey Buzzards, those black phantoms who feast after the trail of death. But away up in the azure of the heavens was the great monarch, soaring for hours on tireless pinions, as the morning sun was reflected off his golden brown plumage I recognized the great Golden Eagle.

I then turned and proceeded up the trail proper. Sitting in the branches of the Boxelder tree was that beautiful bird that is sometimes taken in error for the Robin. True enough, his breast is red, and just as red as the Robin's, but as I looked closer I beheld the black crown and the large, thick bill. This was enough to disclose his identity. He was none other than the Black-headed Grosbeak. His mate was close by and was easily distinguished by the yellow breast and the double bar on the wings.

Rounding the first bend in the trail I saw my friend, hopping along the trail. His color and his habit of running and stopping immediately designated the Western Robin. My attention was then called by the party to a bird that was jumping around in the Arizona Wild Grape close to the ground. I immediately suspected it to be the Spurred Towhee, and this was verified by the red breast, the long tail with the white spots, and his characteristic manner of balancing himself.

On entering the Zion Stadium my gaze wandered until I saw the curtain of columbines that adorns the sheer walls. Flitting from one columbine to another on wings that were invisible was the Black-throated Humming Bird. As he stood still before one of those brilliant yellow flowers and pushed his long bill into the flower to partake of the nectar, I wondered from whence came his wonderful energy.

In the hanging gardens I could hear our little friend that sings with such a loud clear whistle. His song reminds one of someone whistling down the scale. By this alone I knew that the little Canyon Wren was busy foraging in the grasses and among the crannies of the rocks for the spiders and insects. We soon saw the little reddish-brown fellow, who watched us nervously, and bobbed continuously.

When I reached the large pothole that has the small foot bridge across it, the party became much alarmed by what they saw. There on a rock in the middle of the stream stood the "Dipper" or the Water Ouzel. The little grayish-black fellow watched us for a minute, and then plunged into the water, foraging for small fry and other forms of life. He flitted from one rock to another without paying the slightest attention to our presence.

Rounding the trail just before reaching the very end, the loud protesting calls that I heard told me that my quarrelsome friend, the Blue Jay, was on hand to welcome me.

As I slowly retraced my path down the canyon I could hardly agree with those who had told me that the canyon did not have much of a bird life. On the contrary, I was much amazed and gratified by the abundance that I saw.