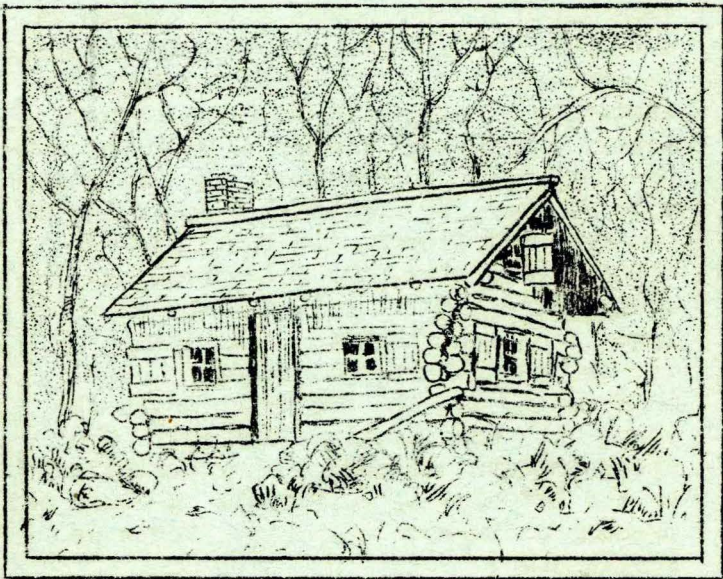


# LEDGES NATURE NOTES



## NATURE NOTES

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Vol. I

August 28, 1938

No. 4

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This weekly bulletin is issued by the State Conservation Commission in cooperation with the Botany Extension Service of Iowa State College. It is prepared for the information of the guests of the Ledges State Park in order that the recreational and educational opportunities of an unspoiled primitive area may be more fully appreciated, utilized and protected.

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M. L. Jones

State Park Naturalist

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### OUR CUSTODIAN

This issue of the Ledges Nature Notes is dedicated to "my good friend and co-worker in conservation, Carl Fritz Henning, the custodian of Ledges State Park, artist, nature lover, and author; to whom the out-of-doors is an inspiration. He loves the wild flowers, he appreciates the color of the moccasin flower, the bluebell, the violet, the aster, the goldenrod, and the autumn tints of the oak, maple, and woodbine; he loves the notes and plumage of the brown thrasher, the cardinal, the meadow-lark and the robin; he loves the rocks with the speckled lichens." The above tribute was paid to our custodian by the late Dr. L. H. Pammel. I would not presume to improve upon his efforts or sentiment.

## STATE PARKS

THE LEDGES AREA has been used for picnic purposes for about 70 years. Efforts were made to develop it as a state park in 1914 but the custodian was not appointed until 1921. It has long been a haven of retreat for the outdoor hobbyist as well as the specialist. About five miles of foot paths and as much creek bed provides trails for exploration.

CONSERVATION IN IOWA. Previous to 1933 no other state in the Union had ever made such a study of its natural resources and developed a general plan for conservation. The birth of the Federal Emergency Conservation work in 1933 enabled Iowa, who had a definite plan, to get under way well in advance of her neighbors. Probably the most obvious and rapid advance under the Twenty-five Year Plan has been in park development. Whereas we had, previous to 1933, 42 parks and preserves totaling approximately 8200 acres, we now have 72 parks and preserves totaling 19,105 acres.

LOW COST RECREATION. The attendance at the parks during 1937 was about two and a half million, making the cost per park visitor five and a half cents. What other form of recreation is available at so low a cost per capita as that supplied by our state parks?

PARK NATURALIST. Which do you enjoy more -- to walk along familiar streets greeting your many friends or to walk in strange surroundings never meeting a familiar face? The State Conservation Commission believes the former is true and to help you know your park with its abundance of trees, birds and other wildlife they have appointed three Park Naturalists. If you feel that you and your community have bene-

fited by this experiment, perhaps this service may be continued another summer.

### PLANT CHILDREN AND HOW THEY TRAVEL

Did you ever think of seeds as plant babies? That is really what they are. All parent plants send their offspring out into the world fully equipped for their struggle with life.

In order to relieve congestion in an area, many seeds are provided with some means of travel -- airships, parachutes, wings, or kites, and some are shot out a distance of several feet, while others are hitch-hikers and travel many miles.

Everyone has seen the little airships of the dandelion, milkweed and thistle. The goldenrod and daisies also travel in that manner. The bladder-nut (a shrub) goes a step farther and builds a sea-plane with three air filled compartments. The basswood sends its seeds out on a kite; the elms, maple, ash and sycamore all have wings and the pines and some grasses send their children out with parachutes.

Some plants resort to shooting to send their offspring away from the parent. The wild geranium seed pod is shaped, when green, like a bird's bill, but when the seed is ripe the pod splits and coils back like a spring, releasing the seed. The touch-me-not explodes when touched scattering its seeds far and wide. It is said the witch hazel explodes with a loud pop when its seeds are sown. The orchids produce such tiny seeds they are carried by the wind like dust. Every one is familiar with the hitch-hikers such as cockle bur, sand bur, and stick-tight that attach themselves to animals or people and go in search of a new home.

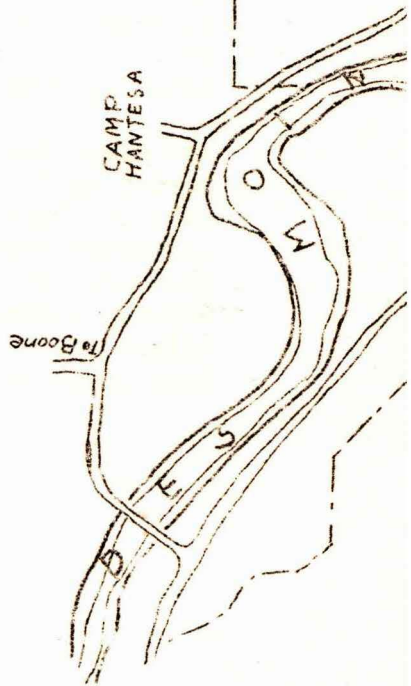
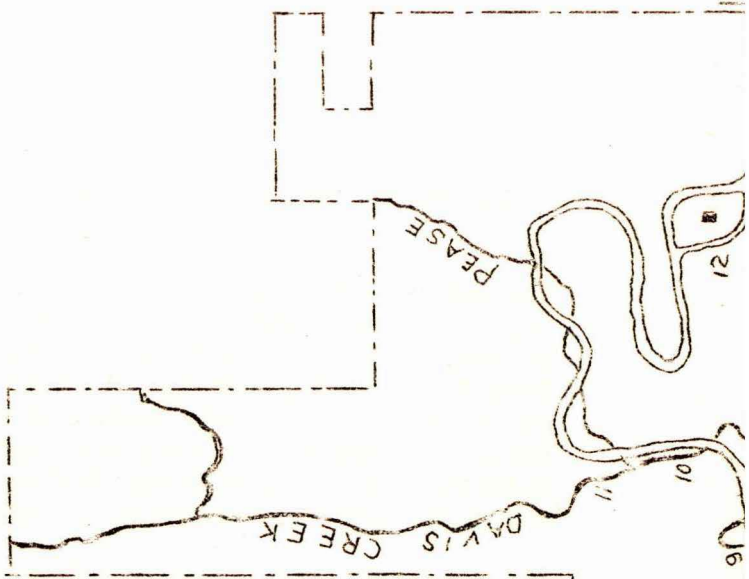
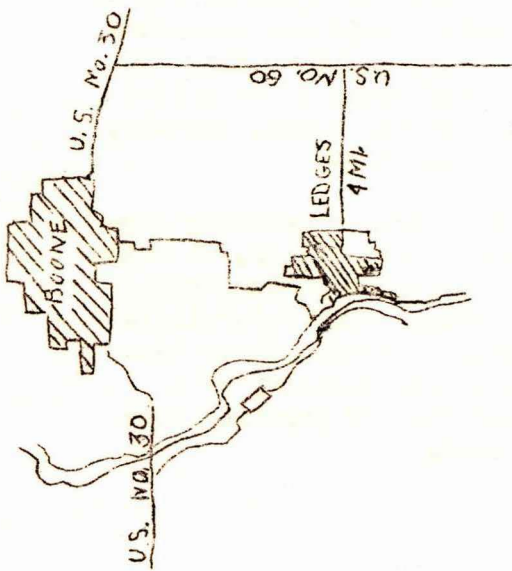
Watch for the plant babies and see how they travel.

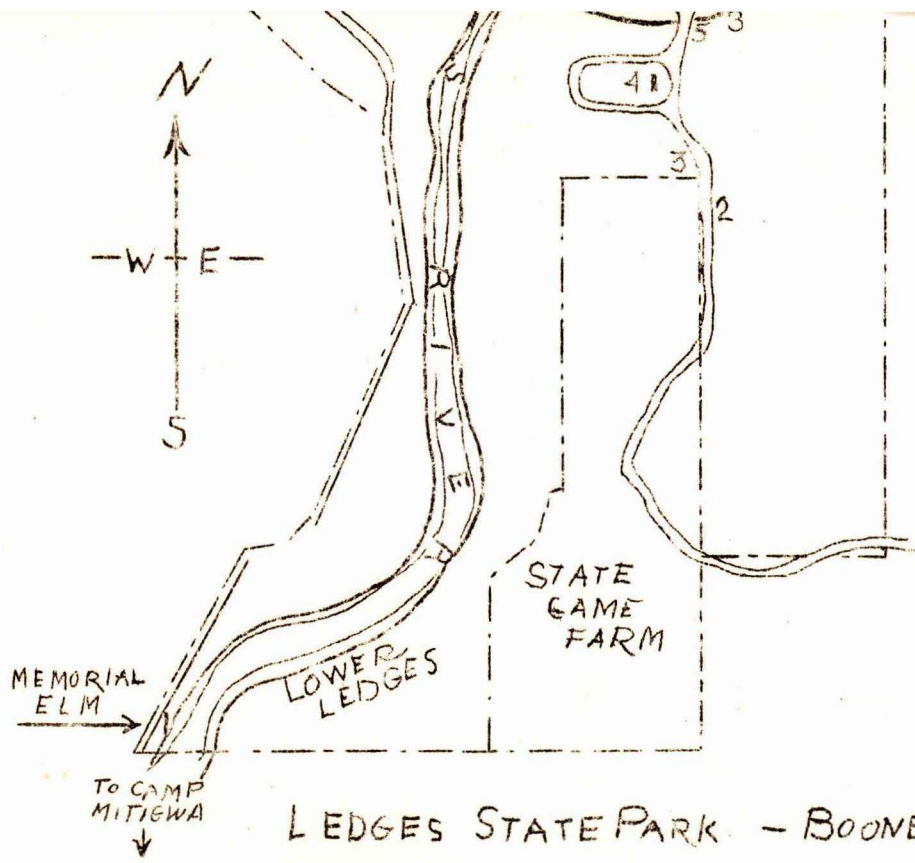
## HISTORY OF THE MARKED TRAILS IN IOWA

The writer gained his first contact with organized "trailing" in 1933 when Dr. Melhus, head of the Botany Department of Iowa State College conducted plant study hikes in Dolliver State Park. It was later he learned that this work had been initiated by the Iowa State College Botany Department in the spring of 1932.

At various times men and women who were specialists in their line gave freely of their time, bearing their own expenses, in order that others might realize the pleasure and satisfaction to be gained from a study of plants, birds, insects, animals, rocks, and stars.

The cause has been thus charitably supported until early this summer, at which time the State Conservation Commission appointed three State Park Naturalists who were expected to divide their time between acting in the capacity of a nature guide and that of pursuing college graduate work.





1. Memorial Elm
2. Animals
3. Custodian
4. Trading Post
5. Museum
6. Greeting Lodge
7. "Old Oaken Bucket"
8. Table Rock
9. Angel's Cave
10. Devil's Cave
11. Indian Council Ledge
12. Oak Woods Picnic Area

LEDGES STATE PARK - BOONE, IOWA

## NATURE'S TIMEKEEPERS

How civilized we have become! If the electricity fails, stopping our clocks and shutting off our radios, we feel helpless because we do not know the time of day or what is happening in China.

The Indians had no watches or calendars; they had no need for them. They lived so close to Nature they knew her every mood and could read her signs. When the Goldenrod blossomed they would say, "Our corn is ripening." When the sunflower was in full bloom their prophesy was, "The buffalo are fat and ready to eat."

We, too, can read Nature's signs if we are observing. The whip-poor-will is Nature's most regular time-keeper. One was clocked in the park for several weeks and his opening call each evening did not vary more than five minutes. Many flowers tell the time of day. The four-o'clock opens at 4:00 p.m., the day lily at 5:00 a.m., the chicory closes exactly at noon, the evening primrose opens at sundown. The compass plant points to the north and keeps us in the right direction. The trees keep a diary -- read it on the stump -- it will tell the tree's age and tell which were dry years and which were wet. The rocks also have their story to tell, and the stars point the direction and tell the time of night and the time of year.

But after all, who cares about time when in the woods. It is a good place to forget time and worries -- a good place to relax and rest.

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DID YOU KNOW that the Compass Plant yields a gum-like substance that Indian children used for chewing gum?



## DO YOU KNOW?

That the Hummingbird is the smallest bird in North America?

That the seeds of the Columbine were used for perfume by the Indians?

That the nearest fixed star is two hundred thousand times as far from the sun as is the earth?

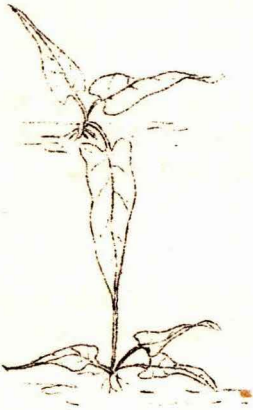
That some plants eat insects?

That squirrels eat worms from nuts, often preferring the wormy nuts to sound ones? That the Red-headed woodpecker has been known to store wormy acorns so that he can be the "early bird" when the worms come out?

That a cowbird builds no nest but leaves her eggs for smaller birds to hatch?

That some weed seeds live for fifty years or more before beginning to grow?

That the bite of a bat is not poisonous? That bats do not carry bed bugs or lice? That they hibernate in caves in winter hanging upside down?



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The walking fern, or "walking leaf" gets its name from its peculiar habit of forming a new plant at the tip of an old leaf. They grow in dense mats in a shady moist place on rocks. The old leaves remain green throughout the winter. Large patches of these odd plants may be seen in the park.

## PLANETS

Interesting observations of our planets may be made on any clear night. Venus, our sister planet, sets about two hours after the sun and may even be seen in mid-afternoon. A small telescope will bring to view some of the moons of Jupiter, which rises soon after dark. Mars may now be seen as a morning star.

## DAY BY DAY IN THE LEDGES

August 17: The Cardinal which has been staying so close to the Greeting Lodge must now be a proud parent for he was observed several times today catching insects from the road, from the newly mowed lawn and from the freshly hoed and weeded paths.

August 19: Found Closed Gentian in full bloom along the trail.

August 20: "Chipper", our friendly chipmunk, produced squeaks and trills much like a bird this morning; -- we had trouble making ourselves believe it too. It must be he was trying to outdo the "singing mouse" that was heard over the radio some time last year.

August 21. After all but one of the star gazers left we spotted something flying. Following it with the powerful flashlight beam it became confused and circled many times, finally alighting in the road at our feet. It was a large sphinx moth.

August 23: Located a trail today which should be of interest to the Sunday hikers. Walking Ferns and the Golden Polypody were seen.

