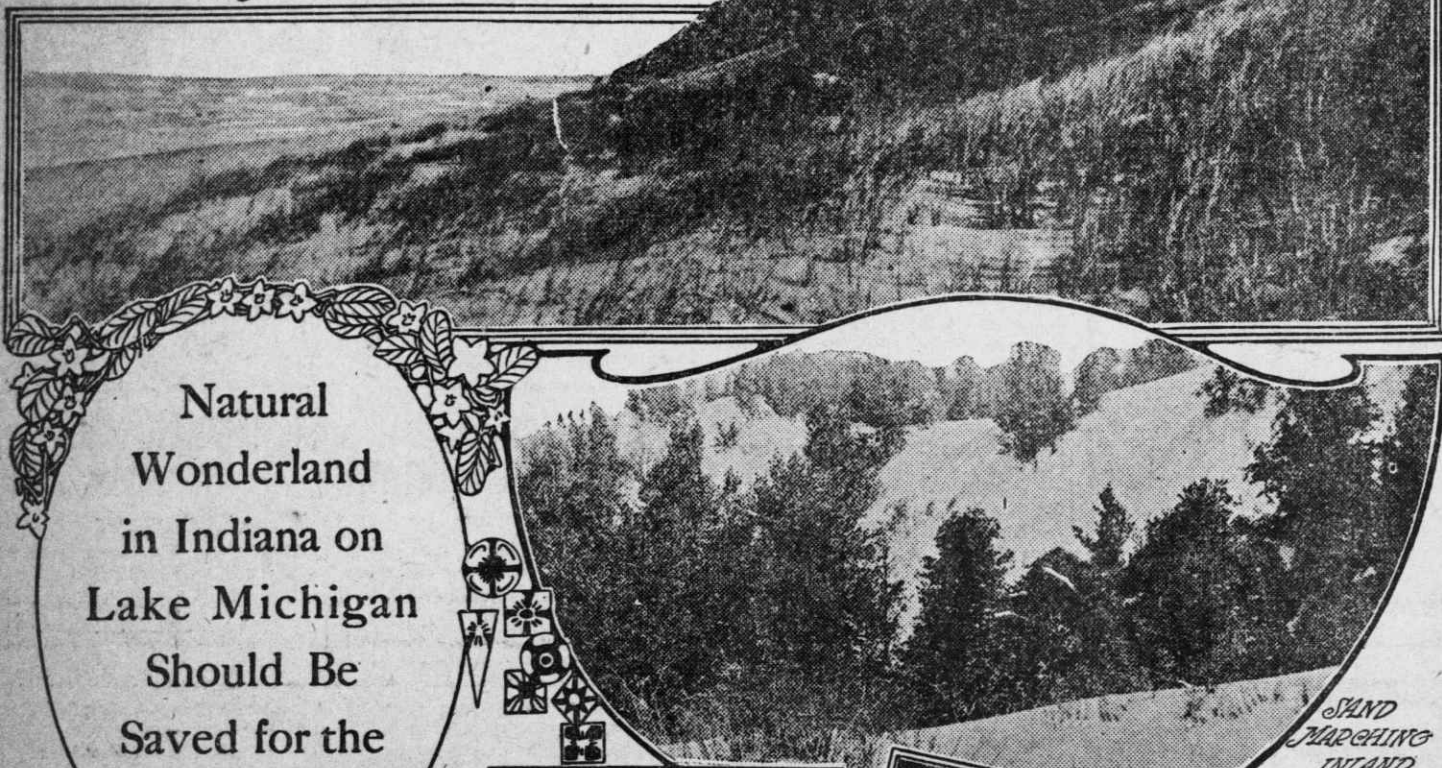


# WANTED: The DUNES NATIONAL PARK

JOHN DICKINSON SHERMAN  
Photographs by FRANCES LA FOLLETTE



Natural  
Wonderland  
in Indiana on  
Lake Michigan  
Should Be  
Saved for the  
People

**W**ANTED: The Dunes National park—in the sand dunes of Indiana on the shore of Lake Michigan between Gary and Michigan City!

The middle West has visited the playgrounds of the people in the scenic West—the national parks of the Rockies, Sierras and Cascades. It has found them good. It has fallen in love with the national park idea. Now it is asking: "Why not a national park right here, instead of half way across the continent?" For there is not a scenic national park worthy of the name between Rocky Mountain in Colorado and Lafayette on the coast of Maine.

So Indiana, Illinois and Michigan want a national park, and they have picked out the dunes as the right place for it.

How they are going to bring about its establishment is a big question. The proposed park area is all under private ownership and is held at speculative prices on the chance of a second Gary being built at the head of Lake Michigan. Even at actual values it would cost about \$2,500,000 to buy the 15,000 acres most desirable for park purposes. The scenic parks of the West were taken from the national forests and the public domain by congress. To date there is no precedent for the appropriation by congress of funds to purchase a national park area. Lafayette was presented to the government for national park purposes by the owners of the property.

Congress has no national park policy. It dilly-dallies with national parks as it does with most other things. It is now generous with appropriations and again niggardly; for instance, it gave Yellowstone \$334,000 and Yosemite \$255,000 in 1910 and kept Rocky Mountain, with twice as many visitors as both parks, down to \$10,000. Politics enters largely into all national park legislation. In the Sixty-fourth congress the interior department supported the bill to enlarge Yellowstone and the bill to add to Sequoia and change its name to Roosevelt. The agricultural department, because the proposed additions would be taken from national forests, and therefore from its control, opposed both bills, beating the former in the senate and the latter in the house. So there is no telling what congress will or will not do in the matter of national park legislation.

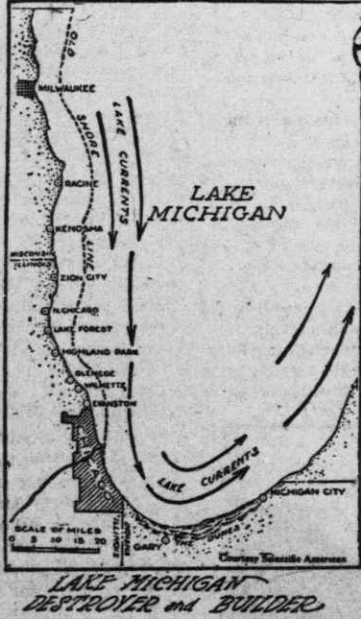
Can congress be induced to appropriate money for the purchase of private holdings for national park purposes?

This question has been put squarely up to congress by two bills introduced at this session. One calls for the appropriation of a million dollars or so for the purchase of Mammoth cave, Kentucky, and its environs for a national park. The other provides for the establishment of the Mississippi Valley National park on both sides of the Mississippi in southwestern Wisconsin and northeastern Iowa. Here the two states own the land under the river, the federal government controls its navigation, part of the proposed area is a Wisconsin state park, some of the land will be donated and the land to be purchased by the government has been appraised at a very moderate price.

Can congress condemn private holdings for national park purposes?

Nobody seems to know. Most lawyers would say off-hand that the state of Indiana can condemn the dunes for state park purposes. And presumably the state of Indiana could transfer the land to the federal government. The national park service has been looking into the question of condemnation. It is advised that the government can condemn private holdings inside of national park boundaries—in fact, a bill is pending to condemn 100 acres in General Grant National park which the owner will not sell for a reasonable price. As to the condemnation of patented land outside of a national park the national park service is yet undecided. Condemnation of the dunes has been advocated by private individuals and by the press.

The creation of Lafayette National park has established this precedent: The federal government will accept suitable land presented to it for national park purposes. So, while other questions are being thrashed out, the Indiana, Illinois and Michigan federations of the General Federation of Women's Clubs are engaged in a campaign to purchase the dunes by subscription to purchase them from the government for



There is no question that the Indiana dunes are worthy of national park honors. October 30, 1916, a public hearing was held in Chicago by the interior department in pursuance of a senate resolution. In September, 1917, a printed report by Director Stephen T. Mather of the national park service was issued. This report eliminated from consideration all of the dune country except a strip along the shore of Lake Michigan about a mile deep between Miller's in Lake county and Michigan City. After describing the dunes with considerable enthusiasm, Director Mather says:

"Assuming, without further description of actual conditions in this dune country, that the sand dunes of Indiana are equal to those in any other section of the country; that they are the most accessible dunes; that they possess extremely interesting flora and fauna; that they offer unparalleled opportunities to observe the action of the wind and its influence on the sand and plant life; that the Lake Michigan beach is beautiful and offers bathing facilities for a multitude; that the recreational uses of the region are myriad, should they, or a large section of them, be preserved for present and future generations? If they should be preserved, are they worthy of inclusion in a national park? And if they are worthy of consideration as a possible national park, would it be practicable to establish them as such a park for the benefit and enjoyment of the people?"

He answers the first two questions emphatically in the affirmative. He says this region should be preserved to the people for all time and that it is worthy of national park honors. As to the third question, he thinks it one of legislative policy to be determined by congress, inasmuch as the dunes are not public lands, and private lands have never been purchased for national park purposes. He thinks the park should contain from 9,000 to 13,000 acres, extending 15 or 20 miles along the lake. He finds that options secured by speculators vary between \$350 and \$600 an acre, with one tract of 2,300 acres held at \$1,000 an acre.

"Manifestly," says Mr. Mather, "none of these lands are actually worth \$350 an acre at this time. A figure less than \$200 an acre probably represents the actual value of the average tract of land not under the influence of urban values, due to proximity to cities. Practically all of the larger holdings must be purchased in their entirety. I believe that 9,000 to 13,000 acres of dune lands can probably be secured for park purposes for approximately \$200 an acre. The purchase price of a park of the size suggested would therefore be between \$1,800,000 and \$2,600,000."

The proposed Dune National park is really a wonderful place. In the first place, the dunes are an uninhabited wilderness. The fact that there is an uninhabited wilderness within a few miles of the center of population—in 1910 at Bloomington, Ind.—and at the very doors of Chicago, the second city of the nation and the fourth city of the world, is in itself a marvel. Incidentally, the dunes are within a few hours by rail and automobile of 20,000,000 people. This makes them unique as a public playground.

Again: The dunes are a different world from the monotonous flatness of the Chicago plain. They are a country of hills and bluffs, gullies and valleys. There are all sorts of interesting variations: Little lakes, streams, bogs, meadows. The dunes above the beach are imposing. The beach itself is a playground of sand and water.

rocks and stones and quicksands, sloping very gradually into deep water. There is probably no finer freshwater bathing beach in the world.

Don't think of the dunes as heaps of bare sand in a desert. They are exactly the reverse. They have water, trees, shrubs, vines, flowers, grass, birds and small wild animal life. The truth is that the dunes are a great natural propagating garden with a most astonishing array of trees and plants and flowers. This garden is packed full of flora from the Lake Superior region, the Atlantic coast, the middle South and the western prairie. It seems to have almost everything in the plant line from cactus to cranberries and from pines to tulip trees. A list of only the most characteristic and important plant species numbers 208.

To the ordinary visitor probably the spectacle of the "walking dunes" is the most interesting. Here he sees land in the making. Here today is a towering dune crowned with flowers and plants and trees; tomorrow it is gone and where it was is a great blow-out of glistening sand, with its steep sides strewn with dead trunks exhumed from an ancient graveyard of a previous forest. Today there is a deep gash in the bluff; tomorrow its place is taken by a very lofty heap of white sand that has come up, grain by grain, out of the lake, on which grasses and plants and shrubs and treelets are already struggling for a foothold. Today stands a forest on the edge of a shallow pond; tomorrow it is a cemetery, with even the tree-tops covered by sand marching in from the beach.

The accompanying map and diagram shows where the material that builds the dunes is coming from and how it gets there. Lake Michigan has been taking material from the west shore and depositing it at the dunes for a period reckoned at about 5,000 years. Previous to this period the level of the lake was 50 or 60 feet higher than now and the discharge was toward the Mississippi at a point near where now are the dunes. When the ice-gorge or glacier which prevented the discharge of water into the St. Lawrence was removed and the lake drained into the Atlantic instead of the gulf, the level dropped, the present lake currents set in and the building of the dunes was begun.

Public land surveys made in 1835 and soundings of Lake Michigan furnish the data for these estimates: During the last 5,000 years the waters of the lake have washed away about 500 square miles of land from the shore extending from the Indiana state line northward into Wisconsin. Where this land was is now water from 30 to 60 feet deep. The old shore line extends out from three to nine miles; then there is an abrupt drop of several hundred feet.

This is an unparalleled erosion; it is accounted for by the softness of the shore, which is largely composed of material that was ground very fine by the glaciers that deposited it. It is estimated that 7,000,000 tons of soil is taken yearly by the lake from the shore north of Chicago. So there is plenty of material for building operations at the dunes.

These facts suggest this interesting question: What will happen to the dunes when the supply of building material stops?

And stop it will, and that comparatively soon. For the shore north of Chicago will in a few years be pretty solidly settled by people who have money to spend to prevent further erosion of the shore. In fact, erosion has already been stopped over long stretches, and in many places the shore has been built out. The time is coming when the west shore will be protected from erosion by piers and breakwaters. The supply of building material for the dunes will presumably stop. Perhaps then the dunes will stop "walking."

Let us hope that long before that time the Dunes National park will be a people's playground dedicated to public recreation forever.

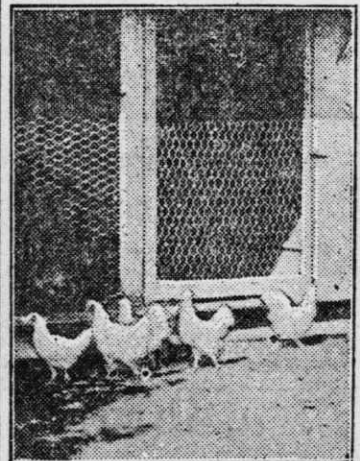
## FARM POULTRY

### CONSTRUCTION OF HEN HOUSE

More Fowls Can Be Kept on Small Floor Area Under Colony Than on Intensive System.

(Prepared by the United States Department of Agriculture.)

A house constructed for the convenience of the attendant will have enough cubic air space provided 2 to 5 square feet of floor space is allowed per fowl. Fresh air should be secured by ventilation rather than by furnishing a larger amount of cubic air space than is required for the convenience of the attendant. The necessary amount of floor space depends upon the system, on the size of the pens, the weather conditions, and the size of the birds. More birds can be kept on a small floor area under the colony than on the intensive system, where the colony system is used in a mild climate and the hens have free range throughout most of the year. Colony houses holding from 30 to 75 hens are about as large as can be



An Open-Front Poultry House Keeps Hens Healthy.

easily moved, but larger numbers may be kept in one flock in a long house. Flocks of from 60 to 150 are well adapted to the average conditions for the production of market eggs. Large numbers require less labor, fewer fences, and a lower house cost than small flocks, but there is a greater chance for disease and the individual hen receives less attention.

### TEN WAYS TO PREVENT LOSS

First, Select Pure Breeds That Lay More and Larger Eggs—Collect Eggs Frequently.

(Prepared by the United States Department of Agriculture.)

1. Selecting pure breeds that lay more and larger eggs, such as the White Leghorns, Wyandottes, Plymouth Rocks, Rhode Island Reds, Orpingtons, etc.
2. Giving better care, food, and shelter, with dry, clean, vermin-proof nests.
3. Confining males except in breeding season.
4. Collecting eggs frequently, especially in hot or muggy weather.
5. Storing eggs in a dry, clean, cool place.
6. Using small and dirty eggs at home.
7. Marketing frequently, with protection at all times from heat.
8. Selling for cash on a basis of size and quality, "loss off" instead of "case count."
9. Using an attractive package.
10. Combining shipments as a matter of economy.

### PROPER CARE FOR GOSSINGS

As Young Fowls Grow Older They Consume Considerable Grass and Other Green Stuff.

(Prepared by the United States Department of Agriculture.)

The brooding and feeding of goslings is not much different from that of ducklings except as the goslings grow older they consume considerable grass and other growing green material and in that way cut down their feed bill. They can be allowed free range when they are two weeks old. Goslings are seldom brooded artificially but will do well with mother geese, hens or even ducks.



Provide a nest for each 4 or 5 hens.

Feed table and kitchen waste to the hens.

Give a light feed of grain in the morning.

Begin marketing the cockerels as soon as they weigh one pound or attain a marketable weight.

When selling eggs to the country merchant or cash buyer insist that the transaction be on a quality basis.

Eggs from "stolen" nests should not be marketed; they are of unknown age and quality and should be used at home.

## DAIRY THE DAIRY

### FREE HERD OF TUBERCULOSIS

Estimated by Department of Agriculture That Disease Causes Annual Loss of \$25,000,000.

(Prepared by the United States Department of Agriculture.)

The 165 veterinarians of the United States department of agriculture who are in the field doing tuberculosis eradication work, together with an equal number of state men, have tested approximately 500 purebred herds and found them free from the disease. The owners of these herds have been given an official certificate, stating that they have tuberculosis-free accredited herds. The veterinarians also have given one test to 2,000 herds in preparation for the accredited list. The



Herd Affected With Tuberculosis.

owners of all these herds, together with the breeds and number in each herd, will be listed in a publication soon to be issued by the department. Figures show that since July 1, 1918, 300 accredited herds and 1,000 herds that have passed one test have been added to the list. The veterinarians now have under supervision 1,200 herds of purebred cattle and 600 herds of grades which have shown by previous tests that one or more animals have tuberculosis. The publication lists 1,100 owners of grade cattle which have successfully passed the requirements for tuberculosis-free accredited herds. It is estimated that this disease causes an annual loss of \$25,000,000.

### SUITABLE SPRAY FOR FLIES

Mixture Suggested by Iowa State College Will Keep off Pestsiferous Little Insects.

The Iowa State College experiment station suggests the following mixture as being suitable for spraying dairy cows for flies:

Four and one-half quarts of coal tar dip, four and one-half quarts of fish oil, three quarts of coal oil, three quarts of whale oil, one and one-half quarts of oil of tar. Dissolve three pounds of laundry soap in water, add the ingredients of the spray, and bring the whole up to thirty gallons with lukewarm soft water.

This spray will keep off the flies and prevent the coats of the animals from becoming harsh. The cows should be sprayed twice a day—in the morning after milking and in the afternoon when in the barn for silage, or green feed. With a portable cart, made from a half-barrel by attaching wheels and a spray pump and nozzle, two men can spray forty cows in five minutes.

### MUST REPAY GENEROUS FEED

Cow Is Living Machine, Taking Raw Materials and Working Them Over Into Milk.

(Prepared by the United States Department of Agriculture.)

The cow must be regarded as a sort of living machine. She takes the raw materials given her in the form of food and works them over into milk. If the supply of proper materials is small, the output will be small. The cow that will not repay generous feeding should be disposed of and one bought that will. There are, of course, certain inbred characteristics or natural qualities which even liberal feeding cannot overcome.

### DAIRY NOTES

There's something to sell every day.

Good silage will cut the feed bill one-half.

The cow with a good appetite is a better producer than the finicky one.

Cows fed well before being turned on heavy green forage will not be likely to bloat.

Sometimes one can fool a slow milker into "giving down" by feeding her at milking time.

Cows will require attention in the summer when the days are warm and flies are troublesome.

Often old cows are offered for sale at low prices but they are seldom a good investment for the dairyman.