## The Lure of the Naturalist

By Charles T. Simpson

AMOST every one who visits the sea shore is interested in the sea shells and the various other forms of marine life which are washed up on the beach, in the different small mollusks and other animals that are found in sheltered pools, the crabs, the fishes and crustaceans.

Here in our vicinity visitors from the north eagerly gather up these things, shells, sponges, the hard parts of sea urchins and other echinoids, star fishes and crustaceans. These are carried to their homes and treasured as mementos or for their attractiveness. Many persons are delighted with various objects of natural history, birds, butterflies, beetles or plants. In many cases those who become interested in these things make collections which they come to prize very highly; later they perhaps exchange specimens with other collectors, they learn the names of things they are interested in.

As a rule, people are first attracted to these things on account of their beauty or peculiar forms; it is only the strange and handsome forms they first care for; then they want to collect everything and to have as complete a collection as possible.

Now and then some such collector who has an observing mind begins to notice the habits, the distribution or other peculiarities of some of the animals or plants in which he is interested and this tempts him to make further observations and investigations; he probably discovers that many animals closely mimic others or their environment; he notices that certain forms are found only in certain places, that they are replaced by other forms in other places; his eyes, ears, and other senses are wonderfully quickened by the pleasure of discovery, he begins to watch

and wait and experiment; in short, an incipient naturalist is developed.

It seems to me that a distinction should be made between the naturalist and the scientist. A large number of the former are born nature lovers; the whole bent of their minds leads them to becoming interested in nature, to investigating into her secrets from sheer love of the subject. Such persons need no college or teachers; nature herself is their teacher.

On the other hand the scientist is often made what he is by education. A young man goes thru college and perhaps must choose an avocation in order to earn a living. The business of a scientist is an eminently respectable one; he is likely to succeed in it as he would if he became a physician, a lawyer or a minister of the gospel. So he takes up some branch of science, perhaps without much choice in the matter, takes a special course of study, gets in on the staff of some college or scientific establishment, investigates and publishes. If he can deliver himself of a learned paper attacking Darwin or some of the older naturalists his chances for fame are enhanced. I have known some such men who have done excellent work and who have made remarkable investigations, who have acknowledged to me that they didn't care a hoot for nature, that this talk of loving it and being en rapport with it was sheer bosh.

This is a long preface for what I want to write about in this article—the attractions for a naturalist in the forests, on the swamps and prairies, or along the streams and the sea shores of lower Florida. I know of no region as easily accessible that contains so much that is interesting, charming and instructive to the ger The notono it doe palme greate crowd he wh whose inab nature the gr world, stantly which the of raged since t

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The piney forest, tho apparently monotonous to the last degree, consisting as it does of an assemblage of pines and palmettos, has for the naturalist the greatest possible charm. It is literally crowded with the secrets of nature, and he who has eyes to see and ears to hear, whose senses are keenly alert, may read as in a book the wonderful story of what nature is doing in it. Here is one of the greatest battle grounds in all the world, for on the one hand nature is constantly striving to make of it a garden in which her plants may flourish while on the other the forest fires, which have raged over the woods with terrific fury since the pines first grew, are seeking to destroy everything. The wonderful devices which the trees and plants resort to -we would call them very clever indeed if invented by man-are a source of never ending surprise to the patient and discerning student.

In this brief article I cannot go into any details but I can say with the fullest confidence that I do not believe that any of the hundreds of species inhabiting our woods are at all seriously damaged by these fires and I do not have any reason to suppose that a single plant that has inhabited these forests has been exterminated by fire.

There is little doubt but what these same terrible conflagrations, which seem to almost destroy everything before them, make it possible for the pine trees to survive and hold their own against all invaders. This is for the reason that the pines as at present developed are capable of standing an amount of fire which none of the other trees can. If the fires ceased to visit the woods, I have no doubt that in less than the length of an ordinary lifetime the whole area would be occupied with hammock, for the pine is no match for the hammock vegetation with a fair field.

The hammocks are of interest to every one, the oasis in the desert, they are like beautiful pictures hung against a plain wall of pine woods. They too are full of secrets for the man or woman who can get in close touch with nature and enter her holy of holies. I never go into one of them without a feeling of solemnity, as if I were coming into the temple of nature, the great cathedral of the Creator.

The story of their origin and development is one of the most wonderful and fascinating of any that nature can tell in all the history of organic life in Florida. The higher hammocks begin their existance in the pine woods, the various trees which act as pioneers or advance agents in extending their area have as terrific battles with fire as do any of those in the piney woods and are much oftener losers.

The life in the hammock is amazingly interesting. The confused maze of trees and vines, often crooked and semi-prostrate, reminds one of a lot of giants clenched in a death struggle. And right here there is a fight to the death going on winter and summer, year in and out, throughout the ages. It is a strife such as most of us little realize, for a place to exist in, for light, for the free air of heaven. Thousands of seeds are annually cast down to the willing earth; some of them germinate, but the floor of the forest is almost as dark as that of a cellar and those plants cannot grow without light, so they soon perish. The Ficus, and in the tropics some other trees, plant many of their seeds thru the agency of birds, high up on the trunks and branches of other trees where they germinate and cruelly strangle to death the host that has

Down on the dark floor there is likely to be a wealth of lovely ferns and in the denser and moister hammocks these are often found on the trees, while in the more open forests the limbs will be loaded, sometimes to breaking, with wild pines,

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mad the s d instructive to Peperomia and a lovely creeping Polypodium. Glorious butterflies sport about in the more open places and at night the fireflies light up the whole with their kindly little lanterns and a variety of insects churr out their monotonous but wholly delightful music.

The ocean beach is one of the alluring spots for the naturalist. There are problems in the geographical distribution of animal and plant life which here can be worked out to great advantage. One gets something of an idea of how the seeds of our tropical flora were and still are being carried in from the southward and are finally established. The various mollusks and shells, the sponges, crustacea and other marine forms of life often tell a story of former connection of our own ocean with others from which they are now separated by bodies of land. The geneology and past migrations of many forms as well as their relationships are often made plain here to him who can read the secrets of nature.

Who is there so devoid of emotion that he can gaze on the wonderful expanse of the everglades without a feeling of awe, without some kind of a sense of his own littleness? As time is reckoned by our almanacs this vast, watery, island-studded prarie is old, but as noted down in the archives of geology its beginning was yesterday, for its creation was probably one of the last acts in the finishing up of Florida as we see it today. It also has its problems which should soon be solved for in a little time the hand of man will have destroyed it and it will become the homes of men.

The geological history of the Lower Florida Keys is one of deep interest; in fact this is true of the entire mainland of the southern end of the state. There is yet much to work out before we can say that our knowledge of it is at all complete. The elder Agassiz claimed that this whole region was of coral formation and that

it was rapidly being built up; two errors which have been almost universally accepted for truth, and it seems to be very difficult to overthrow these false opinions, for truth prevails slowly and error dies hard. From the evidence given by the geographical distribution of plants and some of the land snails, together with what is known of the dissolving power of sea water on our soft limestone rocks it is far more probable that the keys down to the Matacumbes or even farther were not long ago connected with Cape Sable, that Florida Bay was dry land and that the lower part of the state extended farther into the Gulf of Mexico than it does now. The lowermost keys from below Bahia Honda are of a totally different formation from the rest.

Wherever one goes, along the streams, out in the praries, in the dreary swamps, along brackish shores or among the sand dunes there is infinite material for thought and study. The naturalist never has a lonely or idle hour if he can be with nature in the great Out of Doors.

I can understand how the average person who is occupied with the affairs of the world or who is not given to investigation can pass by all the wonderful things of nature and see not. But it is beyond my comprehension to see how any one who has once begun to unravel her secrets can only feel that such work is mere business, the skillful occupation of the mind in the same way that a detective, a banker or a merchant does.

All this wonderful scheme fills me with reverence; there is a feeling of elation, of unspeakable joy for me whenever I have solved one of nature's problems; it seems to me that she has drawn aside the curtain and admitted me into partnership with herself, into the holy of holies. I realize to some extent how little I am; the vast extent of the unknown as compared with the known, and mingled with my joy is a deep sense of humility.

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