

## Chapter 19: Butterflies of Indian River

Where the Bahamas vex the Gulf Stream so that the rich romance of its violet blue is shoaled into an indignant green that is yet more lovely, there is a grape-like bloom on both sea and sky. Standing on the islands that bar the Indian River from the full tides, you may see this bloom sweep a purpling vapor from the sea up into a sapphire sky, which it informs with an almost ruby iridescence at times. The gentle southeast winds of mid-March have blown this bloom in from the sea and sky and spread all the landscape of the southern East Coast with it, a pale blue, smoke-like haze in whose aroma there is yet no pungency of smoke. It is like the blue haze of Indian summer which often hangs the New England hills with a violet indistinctness out of which all dreams might well come true.

The road down Indian River winds sandily, along the bluff always southward toward

the summit. On your left hand you glimpse the blue river with the island a haze of deep blue on the horizon. It is a dreamy world to the eastward, full of wild life. In the shallows schools of fishes flash their silvery sides to the sun. Herons wait, patient in the knowledge that the river will serve their dinner. The Florida great blue in all his six-foot magnificence flies with a croak of disapprobation only when you come too near. Here are the smaller blue herons, in family groups. Ardea wardi and Ardea coerulea are fortunate in having no plumes which are desired of courtesans, else would they, in spite of all law, have been shot off the earth as have the snowy egrets which once whitened the Florida savannas with beauty. Yet both are beautiful birds, and the young of



the smaller heron rival the egrets in whiteness. It is rather singular that a bird that is pure white when young should, on reaching full maturity, so change color as to be at first taken by naturalists for another variety, yet such is the case.

Further out in the shining river frolicsome mullet leap six feet in the air, not as most fish do with a curving trajectory that brings them into the water head first, but falling back broadside on the surface with a spanking splash. Often a big fish will progress three times in the air thus as if trying out the hop, skip, and a jump of athletic competitions. Half a thousand feet out in the shallow water are the spiles of abandoned docks. On these sit the cormorants, black and ungainly, motionless for hours in the steep of the sun, again plunging for a fish and flopping back to the perch to be greeted by most amazing grunts from their companions. Lone pelicans sit lumping down into mere bunches of sleepy feathers with mighty bills laid across the top. You see brown-back gulls fishing and above them soaring a big bald eagle, ready to rob cormorant, gull or pelican with the cheerful indiscrimination of the overlord.

Such is the life that you glimpse through the open spaces as you tare southward toward the sun. But much of the way the river is screened from your view by dense growth of palmettos. In one spot a rubber tree has twined its descending roots about a palmetto till it has crushed the fibrous trunk to a debris of rotten wood and the roots have joined and become a tree, the tree, while the palmetto that nourished it passes to make the white sand fertile for the rootlets of the one-time parasite. Here are hickory and shrubby magnolia, and many forms of cactus. Some of these climb the palmettos, vine-like, to spread the vivid scarlet of their blossoms high among the fronds. These creeping cacti are like creeping, thorny, jointed green snakes of a bad dream. The cherokee bean sends out its crimson spikes of tube-like blooms from leafless stems, roadside spurges show red involucres, and everywhere you find the low-growing composite blooms of the plant which produces the "Spanish needles," seeds that are spear-like akenes to stab as you pass.

The white petals of this composite flower are no whiter than the wings of the great Southern white butterfly that delights in feeding on this pretty, daisy-like blossom. As the summer comes on, myriads of Southern white butterflies make the ridge their hostelry and the road southward their highway. Already they make the road a place of snowflakes, scurrying on March winds all hither and thither. They are as white as snow in flight, the tiny marking of black on the margin of the primaries serving only to accentuate the whiteness. So when they light and fold the wings the greenish tint of the secondaries beneath is only

that reflected light which becomes green in some snow shadows. They serve to make the day cool while yet the sun is fervid, and to walk toward it even at a moderate pace is to perspire freely. Just as snowflakes during a white storm scurry together in companionship and alight in groups beneath some sheltering shrub, so toward nightfall when the level sun just tops the ridge to the westward these Southern snowflakes dance together and light in drifts beneath some overhanging shrub which shelters them from the wind. There hundreds wait for the reviving warmth of the next morning's sun.

Stranger than this is the passing of what seem marshaled hosts along this Indian River road toward the south. The exceptional cold of the winter has kept the imagos in chrysalid and the rush is not yet on. But the time will come soon when each day uncountable millions will pass. Whether this is continued westward into the interior of the State I cannot say, nor do I know whence they come nor whither they go. Perhaps some West Coast observer will be able to state whether this flight goes to the south there or whether the vast numbers round the southern end of the peninsula and go north again. Last November this same southern movement was noticeable in the northern portion of the State, about Jacksonville. In its aggregate it must reach a umber of butterflies which might well stagger the imagination. Butterflies fly easiest against a gentle breeze. One attacked will go off down the wind at express train speed, but as soon as his fright is over you will find him beating to windward again. They hunt, both for food and for mates, by scent. Therefore against the wind is their only logical course.

The trade winds blow gently all summer long, and most of the time during the winter, from the southeast. Hence the butterflies beating against it come to the coast line and follow it down, swarming the Indian River road with their whiteness. What becomes of them all when they get into the lower end of Dade County I cannot say. But if Pieris monuste and his kin of the Southern whites is most conspicuous here because of numbers, there are a half-score other beauties which will soon attract your attention. Of these the largest are Papilios, the various varieties of swallowtail. Here is cresphontes, fresh from some orange grove, as large as one's hand, and of vivid contrast in gold and yellow. To be watched for is his veritable twin brother, Papilio thoas, just a little more widely banded with gold. Papilio thoas feeds upon the orange and other citrus fruit leaves as does cresphontes, but he is the butterfly of the hotter regions to the south, where he replaces cresphontes. Occasionally he has been found in the hot lands of Texas, why not in southern Florida? The thought gives a new fillip to the interest with which I watch. The next turn in the road may bring him.

Time was when cresphontes was found only among the orange groves of the Southern States. Steadily he has been extending his range northward until specimens have been captured in the neighborhood of Pittsburgha, and one has since been reported from Ontario.

Cresphontes and thoas are the largest and showiest of their tribe to be found in the country. With them flitting as madly and erratically is apt to be Papilio asterias, also a symphony in black and yellow, with blue trimmings. The asterias is born of a grub that thrives on members of the parsley family, and you may find his brilliant black and greenish-yellow stripes on almost any carrot bed, North or South. Poke him and he will most strangely put out two horns much like a moth's antennae from some concealed sheath in his head, and at the same time produce a musky smell wherewith to confound you. Asterias ranges from Maine to Florida in the summer time and westward to the Mississippi River. I have found him nowhere more plentiful than here.

In and out of the tangle of the thicket with asterias and cresphontes pass two other Papilios, palamedes and troilus. Palamedes might be described as a larger and more dignified asterias, being nearly the size of cresphontes, but having wider spaces of clear black on the upper sides of his wings. His grub feeds upon the laurels and Magnolia glauca, and the butterfly has been known to visit southern New England though his usual range is from Virginia south. You will easily know palamedes from cresphontes, even on the wing, by the lack of yellow in his coloring. Especially is this true of a glimpse from beneath. Cresphontes rivals the sun in his gold when seen from below, palamedes is dark beneath with the after wings as gorgeous as a peacock's tail with crowded eye-spots of orange and blue. It is rather interesting to note that, handsome as most butterflies are on the upper sides of their wings the under sides far surpass these in gorgeousness, as a rule. I have often wondered why.

Last of the Papilios I have met on the ridge I note with satisfaction good old Papilio troilus of Linnæus. There are many names with which one conjures in the butterfly world,—Scudder, Holland, Edwards, Cramer, Grote, Boisduval, Strecker, Stoll, Doubleday, and a score of others, but none that so touches one's heart as does that of the Father of Natural History. To him came the beautiful things of the young world and received their names, as the animals are fabled to have passed before Adam and Eve. Surely none of the creatures that he named were more beautiful than this butterfly. In him the flaunting yellows are not found. Instead on the black foundation are spotted and stippled most wonderful shades of peacock blue touched modestly with a spot of crimson for each wing. Here is a fine restraint in coloring that shows harmony rather than contrast and puts the more gaudily painted

members of the genus to shame. In the grub stage the favorite food of Papilio troilus is the leaves of the sassafras and spicebush, food through which any caterpillar might well grow into beauty and good taste.

These big swallow-tail butterflies certainly add romance and beauty to the road that



leads sunward down the Indian River. At times, in certain favored spots the air is full of their rich beauty, now hovering in your very face, again dashing madly into the depths of the jungle or vanishing in mid-air as all butterflies so well know how to do. In the grub stage it is not difficult to know on just what they feed. In the butterfly form I am satisfied that during the first few days after emerging from the chrysalis they are so busy

mating that they do not find time to feed. At this stage they dash most wildly and nervously to and fro, seeking always and never quiet for a moment. Later the mood changes and you may find them clinging to some favorite flower so drunk with honey and perfume that you may pick them off with the fingers.

The world just now is full of orange blossoms and heavy with their odor. The honey from their yellow hearts is to be had for the asking and the bees are so busy that the trees fairly roar with the beat of their wings. Yet if I were butterfly or bee I should pass the heavy-scented groves for a flower which just now blooms profusely on the ridge. That is the Carolina Laurel-Cherry, commonly called at the South, "mock orange." This has indeed a lance-ovate, glossy, deep green orange-like leaf, but the bloom reminds me more of that of the clethra. Like the clethra too it has most delectable perfume, dainty and sweet as anything that grows in the South and far surpassing in light and seductive aroma the heavy perfume of the groves. The odor of this shrub floats like pleasant fancies all along the dusty ridge road and continually wooes all that pass,—insects and men alike.

Nor are the Papilios all the bright-winged butterflies of the ridge. Here flies the zebra, his long, almost dragonfly-like wings rippled with black and yellow bars that seem to flow over them as he flies like dapple of sunlight on a black pool. The zebra is a lazy fellow. Compared with most other butterflies he fairly saunters along. I fancy that if one of those long-tailed skippers, or even one of the silver-spotted, that both frequent the same groves, were to find him on their mad track they would telescope him.

The Papilios seem to be the butterflies of the higher air levels. You are more apt to find the zebras flying head high and the skippers still lower. Perhaps this usual difference of air strata is why those collisions do not take place. Lower still, flitting among the very herbs at your feet are other, beautiful if smaller, varieties. Out of the shadows of the foliage come most awkwardly the spangled nymphs, pleased with the sunlight, yet scared in a moment into fleeing awkwardly back

Of these I note commonest Neonympha phocion, the Georgian satyr, singularly marked underneath with rough ovals of iron rust in which are blue-pupiled eyes with a yellow iris. Here, too, is Neonympha eurytus, as common North as South.

There are many more butterflies that one may see in a day's tramp down river in this enchanted land. This day has left with me, as one most vivid impression, the memory of a little patch of trailing blackberry vines whose white blooms are larger and more rose-like than those of Northern hillsides. Upon the patch had descended a snow squall of white butterflies till you could not tell petals from wings, or if it was flowers that took flight or butterflies that unfolded from the fragrant buds. Other spots were dear with tiny forester moths, most fairy-like of thumbnail creatures, the flutter of checkered black and white on their wings making them most noticeable. Once out of the deep shade of the thicket a painted bunting flew and lighted in full view, showing the rich blue of his iridescent head and neck, the flashing green of his back and wing coverts, the red of his under parts. I know of no other bird whose colors are at once so gaudy and so harmonious. He was like a flash of priceless jewels. No wonder he keeps these colors in the shelter of the thickets as much as possible. The hawk that catches a painted bunting must think he is about to dine on a diadem.

So through all the vivid warmth of the long day flit these bright creatures of the sun, and the mysterious bloom of tropic seas blows in with the wind that sings in the palmettos. All tempt one to fare farther and farther south in search of greater enchantment.