

EMERALD KINGDOM II.A

By Alexander Sprunt, Jr.*

The beauty, mystery, and natural history of the Society's famous Corkscrew Swamp Sanctuary are portrayed here in a memorable article and photographs.

All photographs by Donna N. Sprunt unless otherwise noted.

WE WERE sitting, my companion and I, in a place of silence. It was late afternoon, there was no wind, and the sun had disappeared behind the magnificent back-drop of moss-bannered cypresses. The scene before us was one of tranquil beauty, an open lagoon, carpeted with water-lettuce and rimmed about with towering trees, some of which were a century old when Columbus made his landfall in the West Indies.

The sense of antiquity, plus the primeval loveliness of what lay before us had cast a spell upon us which precluded words. We simply sat there on a bench built into the

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—The Editor

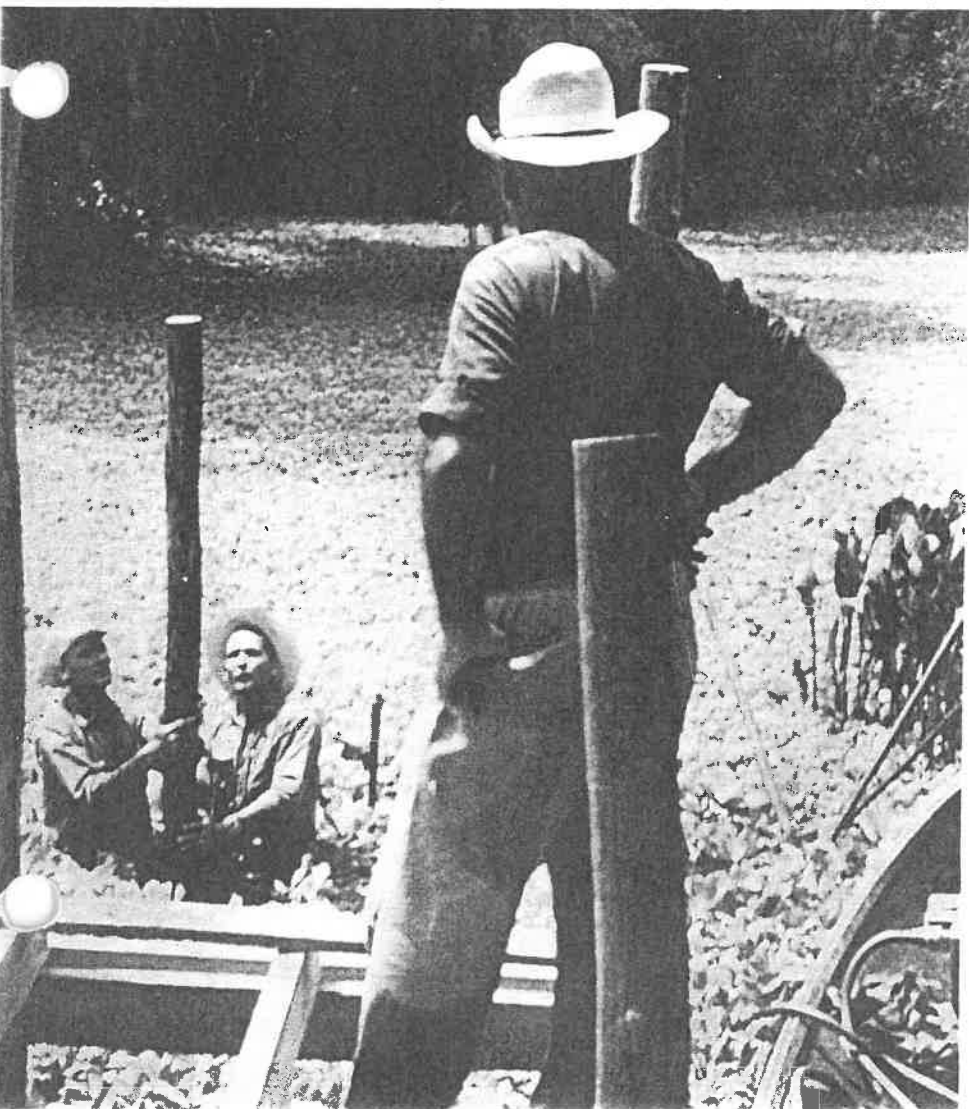
Moss-draped cypresses that were old in Columbus' day rim Corkscrew's Lettuce Lake.





Wood stork photographed by Allan D. Cruickshank.

Task of building the boardwalk in swamp waters as photographed by Alexander Sprunt, IV.



sanctuary boardwalk, and lost ourselves in the almost photographic rigidity of what lay before us. Moments and minutes passed, then suddenly, but still silently, sweeping in across the tops of the cypresses into the blue cloudless dome above us, came an aerial creature of infinite grace and beauty. Shining white it was, with long, pointed wings, the ends and trailing edges of which were black, as was the wonderfully forked tail. It swung in a wide spiral with such effortless and exquisite mastery of the air that the whole effect was breath-taking. Then, in a steep glide, it pitched downward, barely skimmed the top of a nearby tree and after a lightning-like movement of one foot, soared upward with a brilliant green lizard squirming in its talons.

High above us now, in easy grace, the swallow-tailed kite enjoyed its meal — an incredibly lovely bird in an equally lovely setting. Such is the Corkscrew Swamp. If one were asked to compare this place of natural beauty to a precious stone, the gem would have to be and emerald!

Geographically, Corkscrew Swamp lies in the northern part of Collier County, southwestern Florida, in that area known as the "Big Cypress." The Everglades lie miles to the eastward, the Gulf of Mexico some 12 miles to the west. Corkscrew is equidistant from both Miami and Palm Beach — 128 miles away. It is 70 miles southwest of Lake Okeechobee; 16 miles northeast of Naples, and 25 miles east of Fort Myers. The name derives from a very crooked creek feeding a marsh at the northern end of the swamp, and an adjacent village which bears the name, Corkscrew.

In local terminology, Corkscrew is a "cypress strand," a phrase to denote a finger-like band of cypress growth of varying length and breadth. These strands are bordered by stretches of "wet prairie" (where nothing but grasses grow, with attendant flowers) and pine "flatwoods." Many of the strands bear names and most of them have been denuded of marketable timber. Actually, the Corkscrew Strand, or what remains of it (the sanctuary), has the country's largest remaining stand of virgin bald cypress, and some of the oldest trees in eastern North America. In the mid-part of

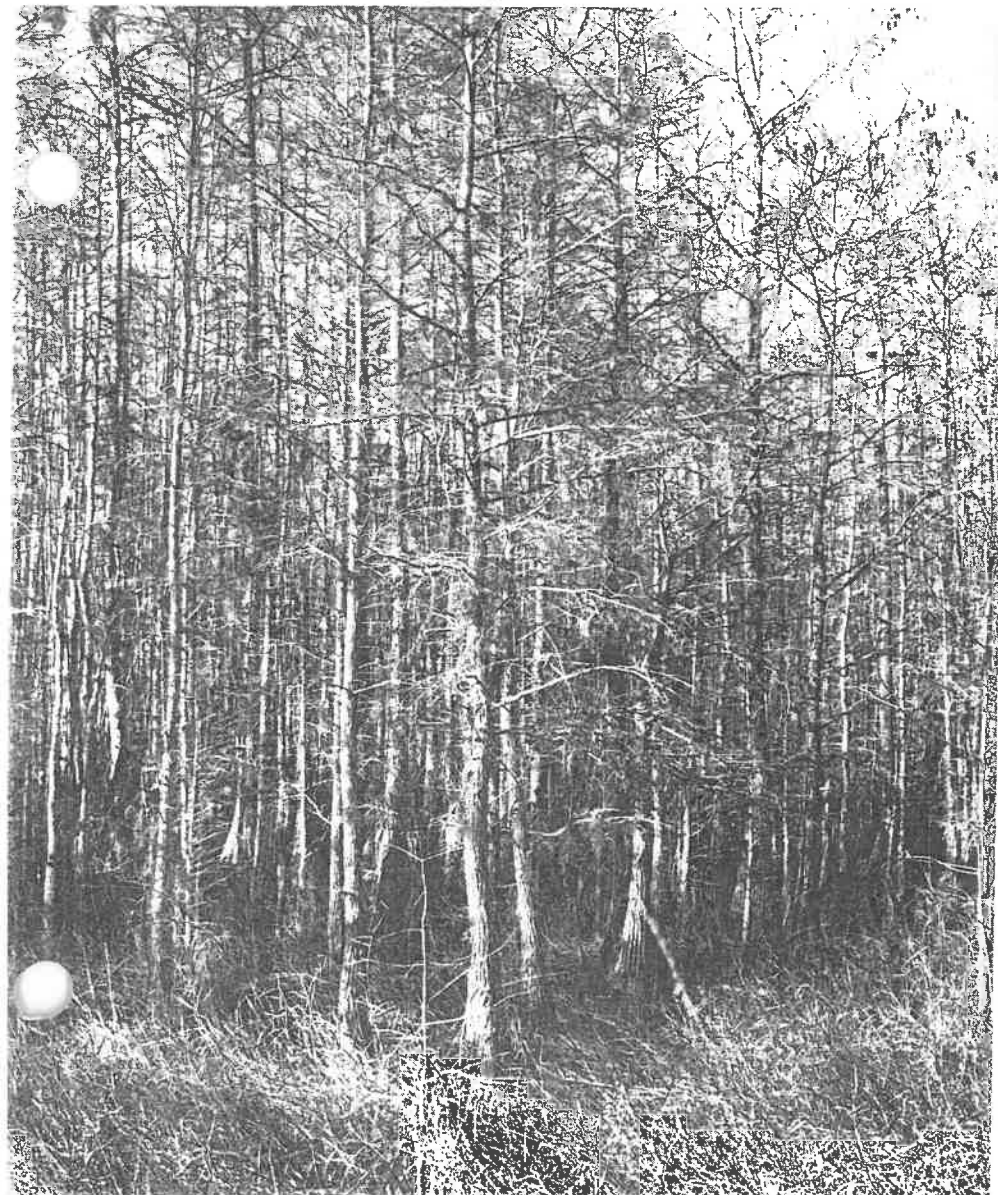


700-year-old cypress encircled by boardwalk.



Fox squirrel photographed by John H. Gerard.

Pond cypress.



1954 the Corkscrew Swamp was next on the list to be cut by its owners, the Lee Tidewater Cypress Company. It was the last remnant of the original Corkscrew Strand, once more than 20 miles long, but which had been reduced by lumbering. It is now a tract about three miles wide and rather more than that long. Before this last stand was cut, the National Audubon Society and its many cooperators got the Lee Tidewater Cypress Company to give the Society an option on $3\frac{1}{2}$ key sections of the tract.

An intensive campaign was begun and the need broadcast. Many rallied to it, particularly foundations, garden clubs, nature organizations, and individuals, and the result was that \$170,000 was raised for acquisition and \$30,000 for such necessary costs as constructing the boardwalk for visitors, fencing, and initial housing.

Of this amount, \$170,000 was paid for 2,240 acres of the primeval tract and, as a Christmas present, the Lee Tidewater Cypress Company gave the National Audubon Society an additional section (640 acres) which has been designated the "J. Arthur Currey Forest," named for the president of the company. This section includes the present headquarters area and the part of the swamp penetrated by the boardwalk.

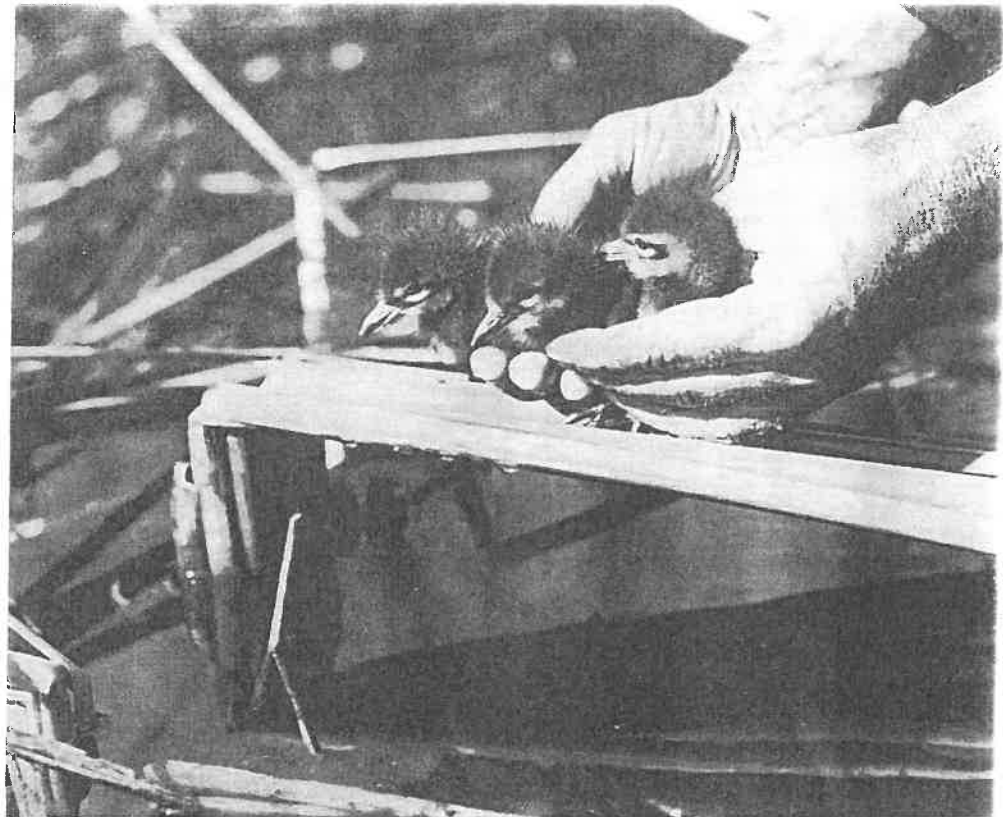
The Collier Company was a generous cooperator in that it leased 3,200 acres to the Society at \$1 a year, with provision for payment by the Society of \$25,000 at later date of title delivery. Thus the entire area now under control by the National Audubon Society is 6,080 acres.

Having secured this invaluable wilderness, the Society now faced the problem of making it available to people who would be interested in visiting the sanctuary, yet keeping it undisturbed. How to do it? Even if it were desirable, few would care to investigate the fantastic beauty of the swamp by "bogging it out," or wading hip-deep through sawgrass, arrowhead, and water-lettuce as did a party of distinguished guests in 1955. The obvious answer was—a boardwalk which would take the visitor to the heart of the area, dryshod. In late 1955, one was started and about a thousand feet were completed into what is known as First

Lettuce Lake, in December of that year. Later, it was continued into the heart of the big tree section by December of 1956 and at this writing, there are 3,555 feet of this walk through a botanical fairyland.

It was a monumental undertaking, necessitating working in water at times chest high. Every cypress post was set by hand by a local crew who knew their job and the local country, and it took four-and-one-half months to build it. The boardwalk made it possible for the Audubon Wildlife Tours to bring guests there. In 1957 these were started, basing at Clewiston on Lake Okechobee, 70 miles away. Clewiston remained the base for three seasons then, in 1959-60, the tours were based at Naples which is much closer by reason of a new highway. The trips from Naples are run from January through April each year. During the summer, the tours are also conducted, but are based at Miami.

In the winter of 1959-1960 the headquarters for maintenance and protective personnel at Corkscrew were enlarged and improved. A major development was the installation of a water system and automatic generator which provides power for the pumps, lights, etc. New toilet facilities were erected, the existing cabin was enlarged by the addition of a bed and bathroom, plus an office. A shower and lavatory were installed in one end of the garage and an elevated trail constructed from the new and attractive gatehouse to the thatched "chickee" where the boardwalk begins. Midway of the boardwalk a shelter has been erected so that visitors caught in rain showers will not be obliged to retrace their way to the headquarters area. At no time in its history has the sanctuary seen so much activity and progress. During much of the construction period it was closed to the public (though not to the tours) and was re-opened January 19, 1960. A charge of one dollar per visitor over 12 years of age was instituted which helps meet the cost of maintenance. From that date to the end of April more than 7,000 people visited the sanctuary, exclusive of the members of the tours. That visitors will increase in the future is inevitable, for the word will get around and more and more



Baby limpkin photographed by Allan D. Cruickshank.

Strangler fig on cypress.





Pileated woodpecker photographed by Allan D. Cruickshank.

Cypress knees.



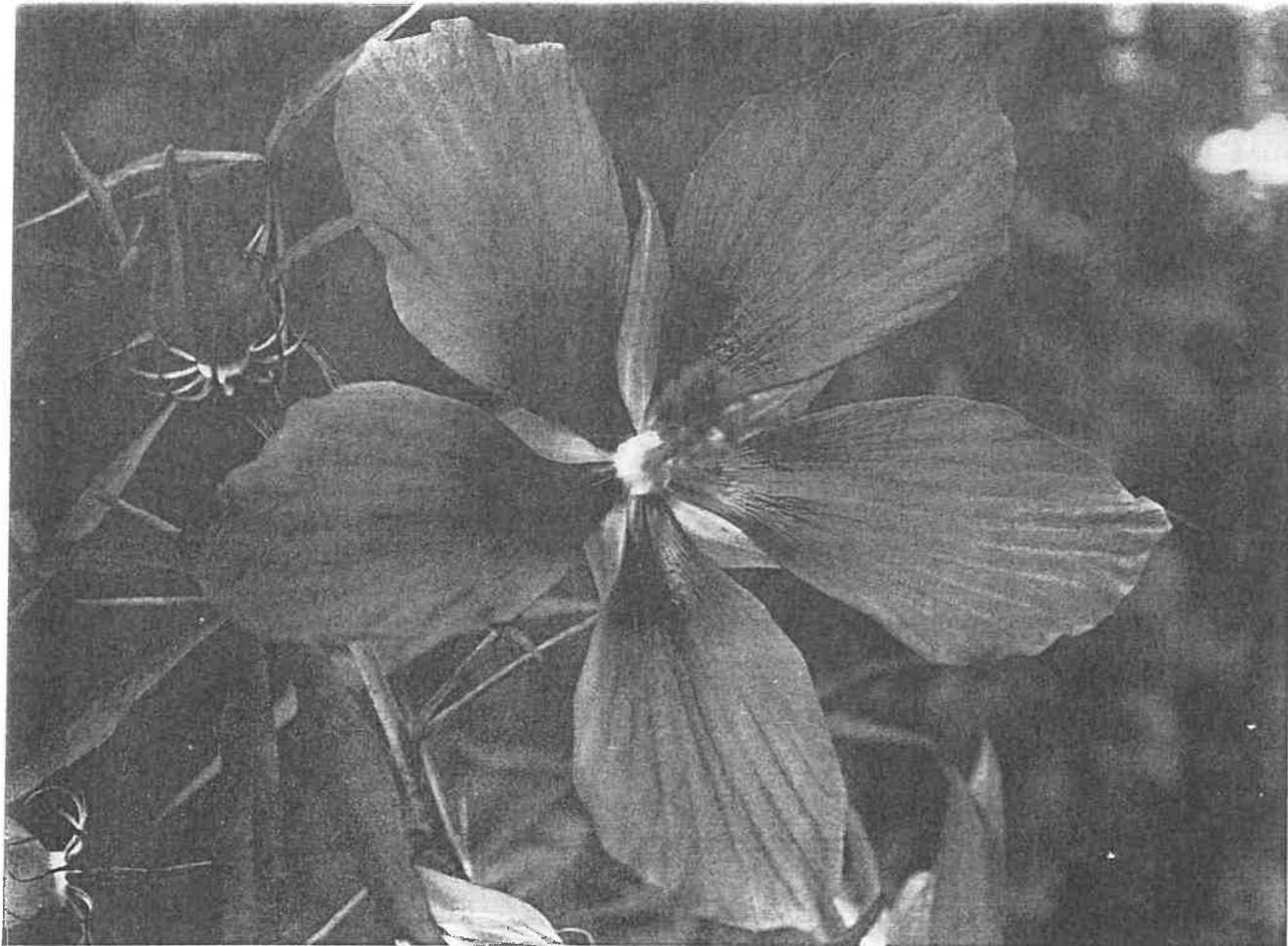
people will want to see the last of the East's big trees. The sanctuary is open every day *except Mondays*.

From the casual visitor to the specialist in any branch of natural sciences, Corkscrew Swamp is a veritable magnet. Botanically, it is bewildering in its luxuriant abundance, from the immense trees themselves down to the diminutive flowers of the jingle-bell orchid and the tiny, round leaves of the floating duck-weed. One is almost overwhelmed by the profusion of living plants of which the cypresses are the crowning glory.

There is but one species, the bald cypress, or *Taxodium distichum* of botanists; however, there is a variety, or subspecies, which is much smaller, more slender, and with different foliage that grows along the edges of the "strands." It is known as pond cypress, *Taxodium distichum nutans*. This is the form seen in such abundance along the western portion of the Tamiami Trail. Instead of the feathery foliage of the larger trees, that of the pond cypress consists of small overlapping scales, appearing more like needles than leaves. It should be remembered, too, that the cypress is a deciduous conifer, which loses its foliage in winter when the trees look stark and bare, and at a time when most visitors to Florida see it. Hence the name "bald" cypress, and also the impression made on many people that they are looking at great numbers of "dead" trees, which, of course, are not dead at all, but simply leafless.

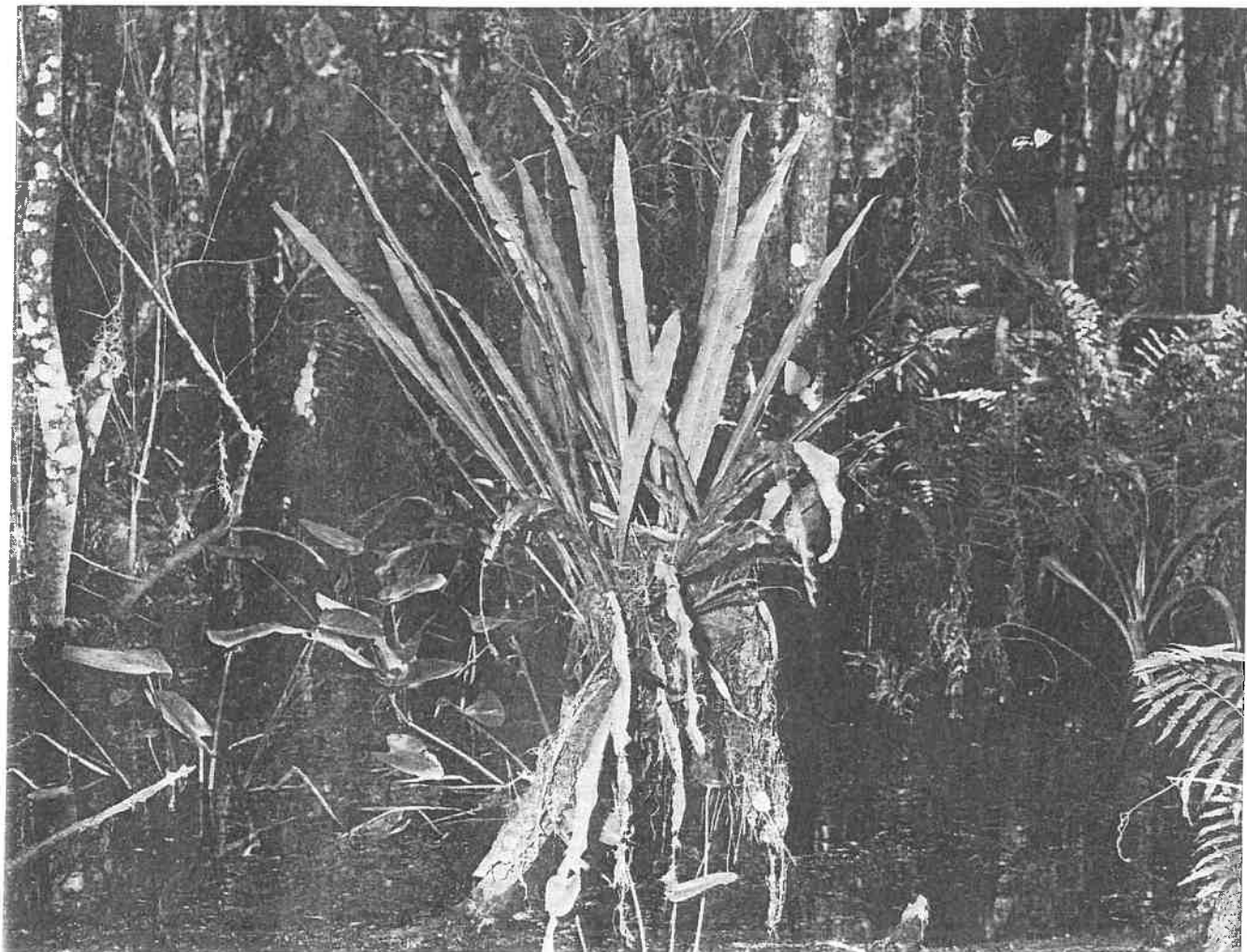
Another unique character of the tree is the existence of the protuberant growths about the base of the trunk known as "knees." These are bark-covered projections from a few inches high to as much as three or four feet. They are rounded or conical, produce no foliage, do not grow into trees, and their function is yet in dispute. One theory is that they are "breathers" for the root system from which they grow, another is that they lend structural support to the roots.

The cypress is a slow-growing tree and cannot be propagated as pines or others are. Many of them in the Corkscrew are 200, 400, and 600 years old. The gigantic specimen surrounded by the boardwalk is very nearly 700 years old, thus putting



Wild hibiscus.

Strap fern.



its "birth" back to about 1260 A.D., some 232 years before Columbus came to America. No wonder the trade name among lumbermen for the tree is "The Wood Eternal."

Among the most interesting and certainly the most abundant of growths in the swamp are the air-plants. They belong to the pineapple family and there are but two genera; these, however, contain several species. Most of them are of the genus *Tillandsia*, the other is *Catopsis*. They do indeed look like pineapple plants at a glance and grow both on the trunks and on the branches of trees. They are the objects which so many visitors take for birds' nests in the cypresses along the Tamiami Trail and elsewhere. In the spring, bright red clusters appear among the spiky leaves which many observers take to be the flowers of the plant. Actually they are not, but are the bracts, from which small, tubular blue flowers come out, adorned with yellow anthers.

One of the *Tillandsia* air-plants is the Spanish "moss" about which great misconceptions are entertained by a great many people. It is considered by them to be a parasite and fatal to trees. It is not a parasite and it does not kill trees. A very heavy growth of these air-plants may, at times, shade out some leaf growth and may, when heavy with wetness, break off a small limb but other than that, it does no harm to a tree. Some of these trees, 500 to 700 years old, support quantities of moss and are still healthy and thriving.

Ferns of the Corkscrew are present in almost incredible abundance. Of the many species which grow there, the huge leather fern is the most spectacular as its fronds may reach a length of from 10 to 12 feet. These look and feel much like leather. Great clumps of royal fern appear atop old knees and stumps, and Boston, swamp, shield, and strap ferns grow there luxuriantly. One of the most interesting is the resurrection fern which grows along the limbs of trees and, when dry, appears twisted, gnarled, and dead. Yet, 30 minutes after a shower it springs into green beauty, which has given rise to its common name.

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A rustic boardwalk takes the visitor 3,555 feet into the Emerald Kingdom.





white lip and rosy center bloom in May and June.

The night-smelling orchid, *E. nocturnum*, produces beautiful white blooms which are fragrant only at night. Although September and October are the best times to see them, they sometimes appear in mid-winter. One of the most interesting and certainly the most inconspicuous of the orchids is the jingle-bell, *Harrisella porrecta*. One can walk by within two feet of it and never know it is there. It is simply a group of slender, grayish roots adhering to a branch, without any leaves whatever. Tiny white blooms appear in September, followed by oval seed-pods which resemble "jingle-bells." The flowers are of pin-head size, and it is the smallest of the orchids.

Somewhat like it but much larger is the strange ghost orchid, another leafless species which looks like a great spider clutching the trunks of trees. It is about the size of a dinner plate and in summer bears white flowers with a long, trailing lip. Fin-

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Great blue heron photographed by Allan
D. Cruickshank.

Florida otter photographed by Hugo H.
Schroder.



Although they are overshadowed by the cypress, other trees are plentiful in the swamp. The large clumps of trees to the right and left of the boardwalk at First Lettuce Lake, which look so gnarled and twisted, supporting luxuriant air-plants and orchids, are custard apple. The fruit is edible. Red bay, swamp maple, and pop-ash are others. The huge leaves of the fire-flag are almost everywhere, and blue-flowered weed and white-flowered arrowhead are abundant. The ribbed water-lettuce and duck-weed, one of the smallest of flowering plants, form carpets in the lagoons and wooded areas. Ghostly spider lilies gleam whitely against the heavy shadows, contrasting sharply with

the flaming brilliance of the huge blossoms of wild hibiscus.

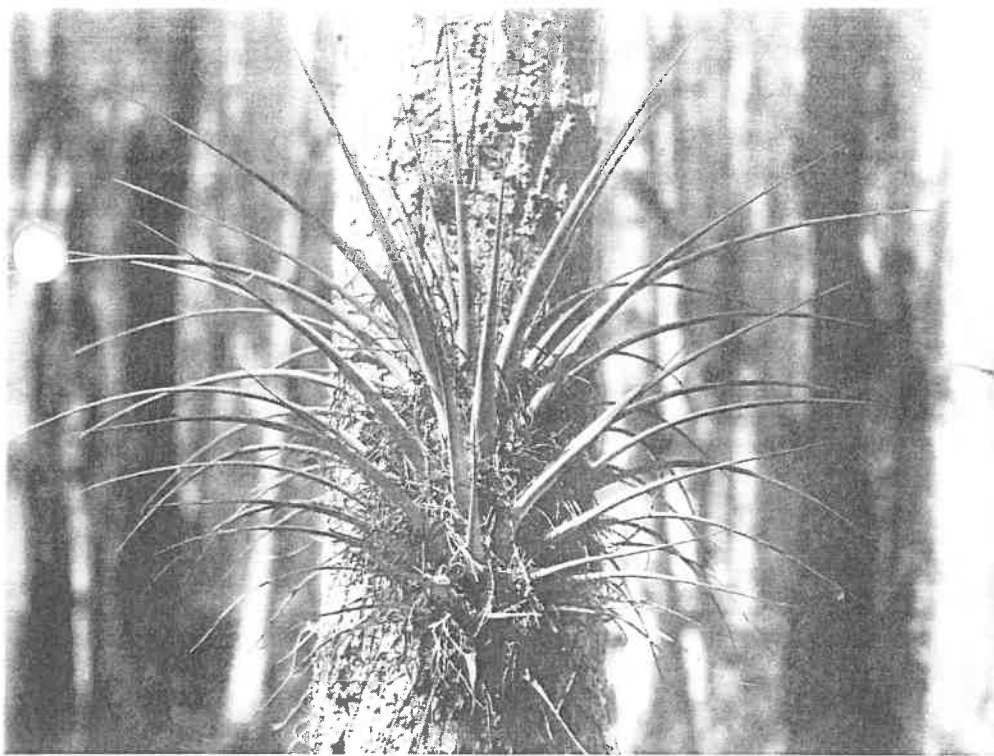
On many of the trees are great cable-like aerial roots which entwine the trunks in close embrace. This is the weird and sinister-appearing tree, the strangler fig. Often starting at the top of a cypress from a bird-borne seed, it sends down the long aeriels which finally become rooted in the soil. Smaller trees such as the palms are often enveloped and choked by this formidable growth.

The swamp's orchids are among its most fascinating plants. These exotically famed growths, so queer in blossom and structure, have been considered unique in the world of

botany. Most of the Corkscrew orchids bloom in summer so that the winter visitor is denied sight of the flowers, but now and then one can be seen in winter and spring. Probably the best known and most easily identified species is the cigar, or cow-horn, orchid, *Cyrtopodium punctatum*. The flowers are borne in clusters on a long stalk and are yellowish, splotted with brown. It blooms in April and is quite spectacular. The onion, or butterfly, orchid, *Epidendrum tampense*, is the commonest and derives its names from onion-like, pseudo-bulbs from which long, narrow dark green foliage springs. Its greenish-brown flowers with a

Some alligators reach 14 feet in length.



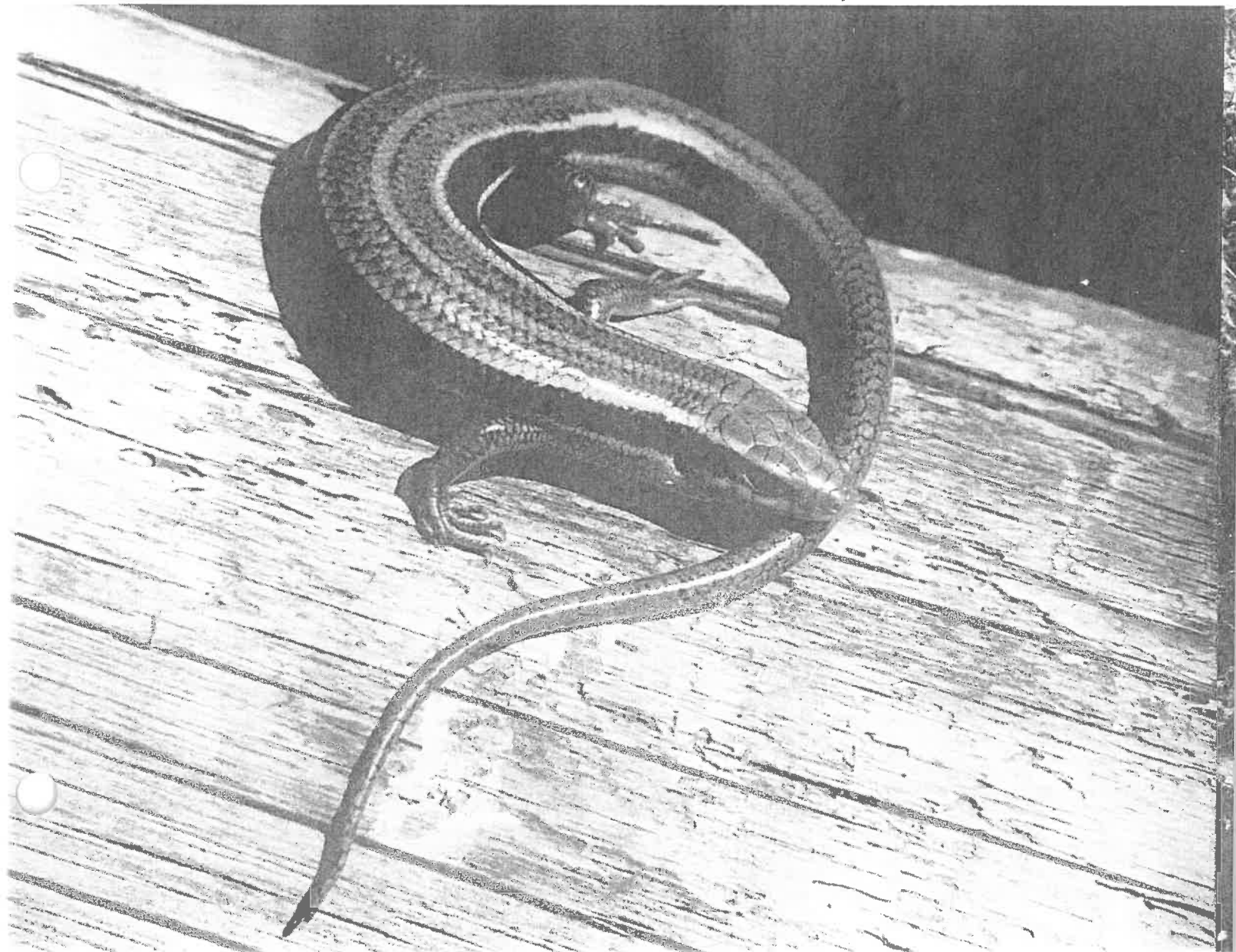


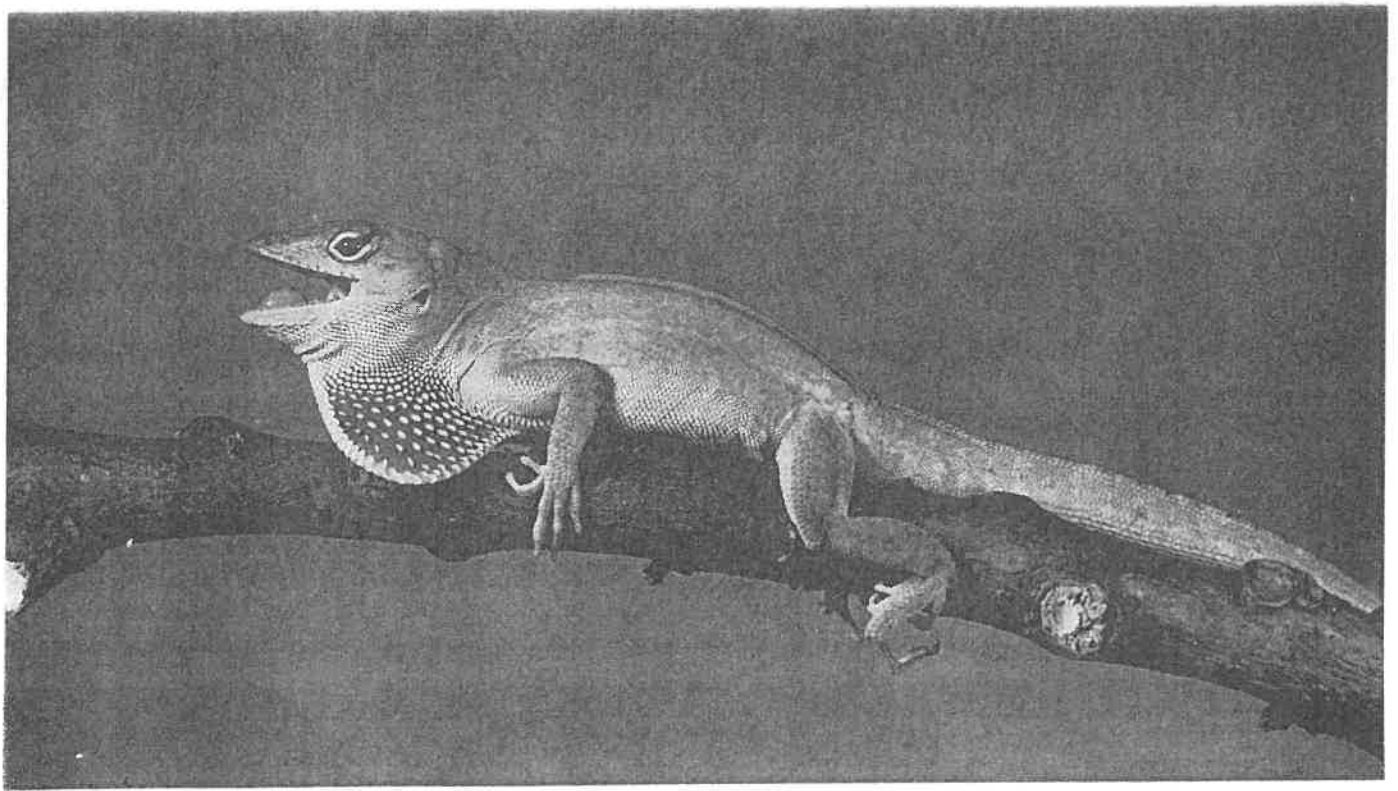
Common air plant, *Tillandsia fasciculata*.

also the small orchid, *Epiphyllum*, appears on tree-trunks, its tufts of bright green resembling a broad-bladed grass. The flowers come out in tufts and are yellowish with a purple lip.

The birdlife of the Corkscrew reaches a dramatic climax in the ancestral colony of wood storks, or wood ibises, which nest in mid-winter in one part of the swamp or another. The season of 1959-1960 was wonderful for visitors as many nests could be seen from the boardwalk from December through April. These created much interest among both the public and the Audubon Tour members. Activity among the wood storks went on at all hours and the birds in the colony numbered some 4,700 pairs. An excellent "crop" of young was raised. American and snowy egrets, great and little blue herons, and Louisi-

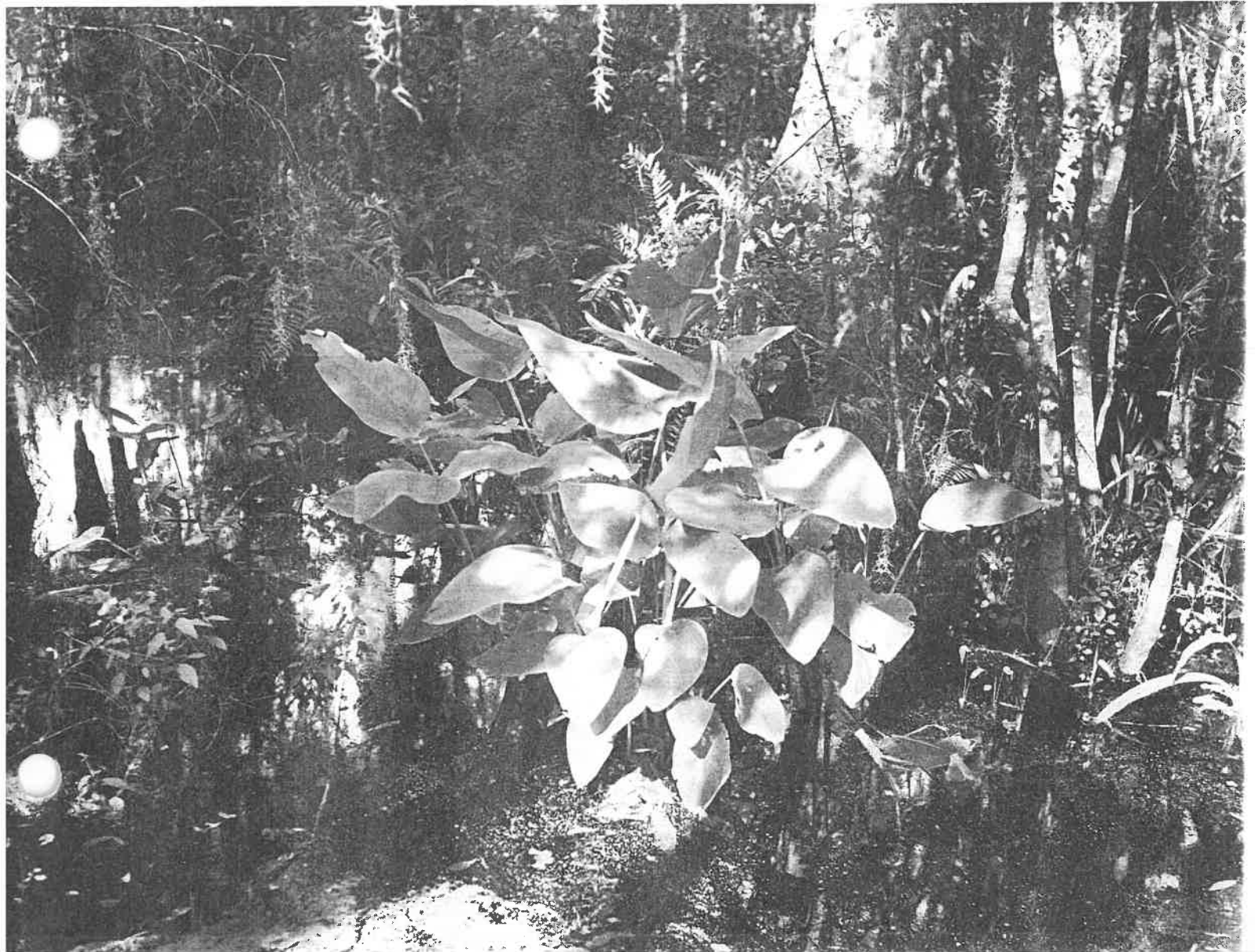
Five-lined skink photographed by Leonard Lee Rue, III.

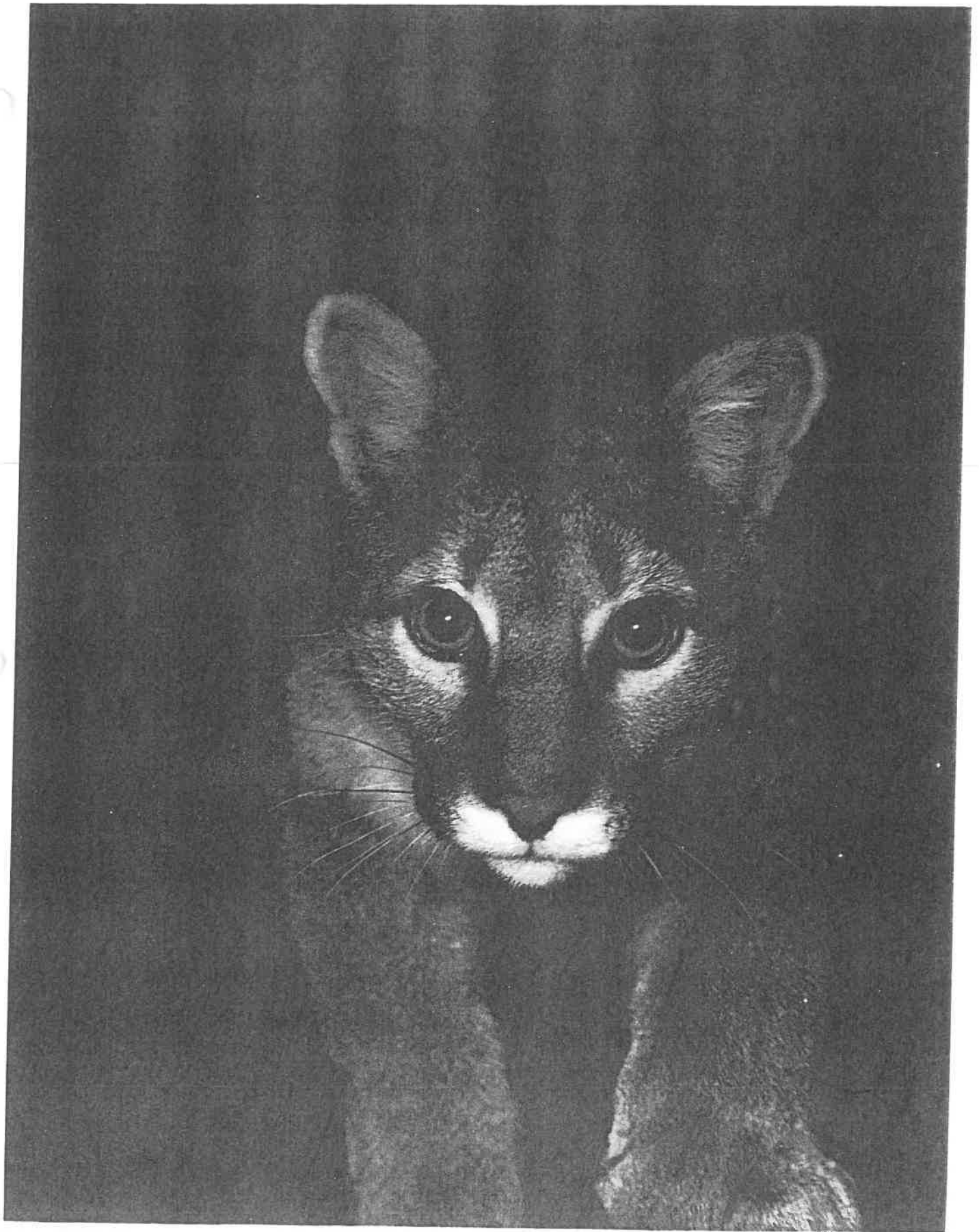




Chameleon photographed by Robert C. Hermes.

Fire flags, *Thalia geniculata*.

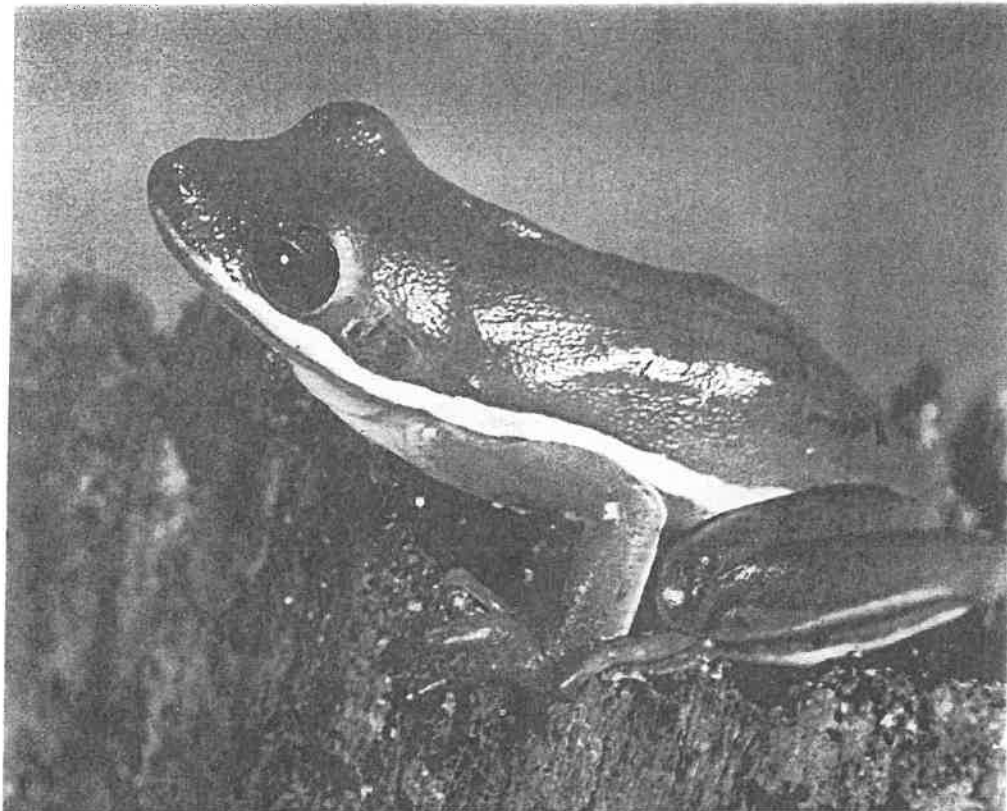




Cougar photographed by Leonard Lee Rue, III.

ana and little green herons are often seen in the swamp. Because of the *Pomacea* snails that live in Corkscrew, the limpkin lives there also. It can often be seen feeding on the snails, which it extracts from the large greenish shells with its bill and without chipping the shell. Piles of the shells can sometimes be seen at a favorite feeding spot. In the spring, broods of the downy black young limpkins may be seen following the parents about. White ibises visit the lettuce lakes occasionally and, in spring, the exquisite swallow-tailed kite soars above the cypresses.

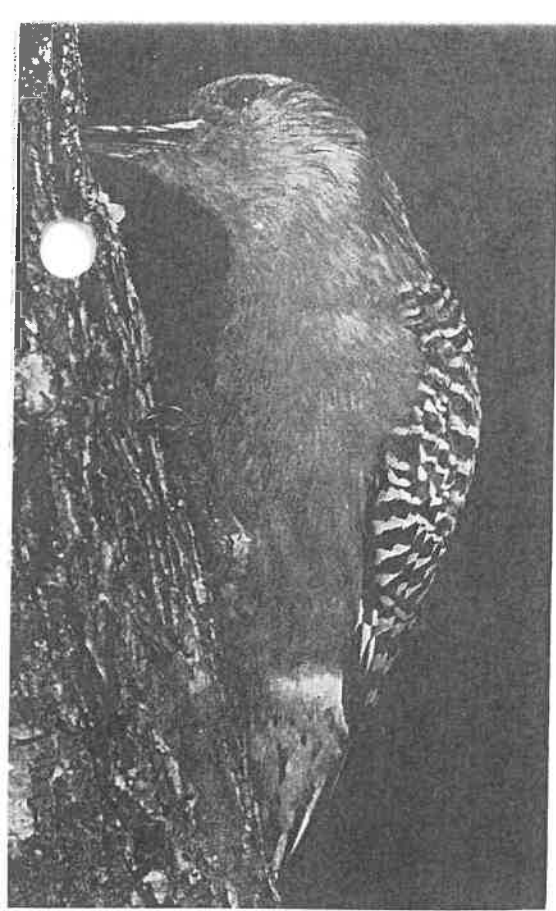
Pileated and red-bellied woodpeckers make the swamp vocal, also resident barred owls which often call by mid-afternoon. Small resident birds are the tufted titmouse, Carolina wren, cardinal, towhee, and blue-gray gnatcatcher. Red-shouldered hawks remain the year around. Small migrants are sometimes abundant, sometimes scarce, depending on weather conditions and the sea-



South Florida green tree frog photographed by Dade Thornton.

Fallen cypress log plays host to ferns.





Red-bellied woodpecker photographed by Edwin J. Howard.

son. These are warblers, thrushes, vireos, and tanagers, with many others. In winter the yellow-throated, black-and-white, prairie, and palm warblers are in the swamp.

Among the reptiles the alligator can be seen practically every day in the year. From 12 to 14 feet long, they range down to very small ones, and many have become so accustomed to people on the boardwalk that they remain at very close range on logs or tussocks of plants that project above the water. Chameleons that scurry along the deck and rail-

ing of the boardwalk change color momentarily and show the red fan-like protuberance of the throat. Five-lined skinks run about occasionally, and one of the outstanding field marks is the bright blue tail.

Few snakes are seen but they are there—cottonmouth moccasin, diamond-backed rattlesnake, black-snakes, water snakes of several kinds, ribbon snakes, and fox snakes.

There are gray and fox squirrels in the swamp—the fox squirrels very large and showing a white nose and ears. Otters are quite often seen,



Swamp lily, *Crinum americanum*. →

Shell orchid, *Epidendrum cochleatum*.



sometimes on the boardwalk itself. Bobcats, or bay lynx, are common in the area but so shy that a glimpse of them is not often had. Deer live around the swamp edges, raccoons are common, and the panther, or cougar, still exists in the general region.

With all the animate and inanimate life which the Corkscrew presents, the paramount impression of any observer of this fascinating area is the gratifying conviction that what one sees has *always* been there and *always* will be. It is a breath of the primeval, a majestic remnant of what once was a great portion of the southeastern United States. The National Audubon Society is dedicatedly determined to preserve it for posterity.

—THE END