NATIONAL PARKS *Magazine*

The American alligator,
an endangered native reptile

December 1967

Water for Everglades National Park

On November 16, 1967, the National Parks Association presented its views, at a public hearing in Coral Gables, Florida, on the recently published plan of the Corps of Engineers for providing Everglades National Park with adequate supplies of fresh water. The statement, submitted on invitation of the Corps, appears below.

THIS ASSOCIATION HAS ENGAGED IN MANY STUDIES OVER THE years of the problem of an adequate water supply for the Everglades, and particularly Everglades National Park.

We wish to commend the Army Engineers on the fact that the present proposal contains no provision for storage within the park itself. The ecological dangers which would be involved in barriers within the park, or along the southwestern coastal boundary of the park, are by now well known. The natural exchanges of salt, saline, and fresh water must be maintained; the main problem is to provide an adequate flow of fresh water into the park.

We commend the authors of the plan on omitting storage within the park, and most certainly on omitting any recommendations for a barrier along the southwestern coast, or any possibility of any future road or causeway along that coast; such projects would be resisted by a united conservation movement with strong support from all of the American people.

We also commend what appears to be an earnest effort to provide for engineering works by means of which considerable quantities of water can be brought from Lake Okeechobee toward the park.

Raising the level of Lake Okeechobee ought to solve many problems, provided that a sufficient part of the new storage can be earmarked irrevocably for Everglades National Park. The question of nesting areas for the Everglades kite in the Lake Okeechobee region needs to be settled before the lake levels are raised.

It is thought by ecologists that barriers need to be installed on all the canals in the Miami area to provide two feet of fresh-water head; there seems to be no provision for such barriers in the plan.

The removal of the humps from the North New River and Miami canals toward the park is desirable.

We note the new canals to be constructed within the park boundaries to facilitate flows into the park. Our question is whether these canals are merely substitutes for an adequate head and adequate releases from Conservation Area No. 3; if they are such a substitute, provision for proper management of water from Area No. 3 should be made first.

The total omission of any reference to management of water levels and releases in Conservation Area No. 3 is glaringly apparent.

The old question remains, whether the Army Engineers have surrendered their authority to manage water works constructed at the expense of the American people as a whole. The public is entitled to an answer to that question from the responsible public officials in terms of precise legal opinions. If they are not forthcoming voluntarily, it may be necessary for conservation organizations to institute proceedings in Court.

This present plan should provide for the maintenance of adequate water levels in Conservation Area No. 3 to maintain flows into the park at ecologically satisfactory rates in all years, in all seasons; also adequate releases through present structures; the language of the present plan appears to contemplate supply to the park from Area No. 3 as well as directly by canal; the question of control is therefore crucial.

No consideration apparently has been given to the use of the intricate canal system leading from Lake Okeechobee down the western side of Conservation Area No. 3; we ask why not?

No consideration has been given to the maintenance of adequate water levels in the Everglades country north of the western end of the park. As drainage proceeds in that area, this part of the park will be cut off. The plans should include provision to prevent such a cutoff.

We have expressed our qualified concurrence in recent plans for the operation of Canal 111, southeast of the park, by the use of culverts in such a fashion as to prevent saline water intrusion into the southeastern corner of the park. Why have these plans not been incorporated in the comprehensive plan? * * *

Our main criticism of the current proposal relates to paragraph f.[1] We have the impression that 315,000 acre feet of water annually is inadequate. We have concluded in earlier studies that 400,000 acre feet might be necessary.

The seasonal distribution of deliveries is vitally important; June, for example, is a crucial month. The proposal fails to provide monthly delivery schedules.

Worst of all, all deliveries apparently will be *furnished whenever practicable*. This leaves the whole situation precisely where it was before the current engineering proposals were advanced. In this respect, in our judgment, the plan completely fails to provide the answers which Congress presumably sought in making the assignment.

This failure to meet the central issue confirms the view held by many resources management experts, that basic policy planning cannot be entrusted to the operating engineering agencies such as the Army Engineers, the Bureau of Reclamation, Tennessee Valley Authority, and the Soil Conservation Service; nor indeed to coordinating agencies of such operating agencies, such as the Water Policy Council. What is needed is a permanent National Water Commission which will set goals of operations.

However, for present purposes, any satisfactory plan for water for Everglades Park must provide for minimum annual deliveries and minimum seasonal and monthly deliveries, in wet years and dry. We shall undertake to specify the precise amounts later, if, as and when, the present proposal moves forward, on invitation.

We are not at all satisfied with the amounts which have been suggested in the past by the National Park Service. We consider that it is the responsibility of the Service in the first instance to make the necessary ecological determinations; it is the responsibility of independent private scientific organizations to criticize those determinations if they are inadequate.

It is the responsibility of the operating engineering agencies to deliver the water. And no plan intended to provide such delivery will be satisfactory unless it gives permanent and specific guarantees of delivery by years, seasons and months.

There is an increasing sentiment throughout the United States that no further funds should be provided by the Federal Government for drainage in the Kissimmee River area or elsewhere in Florida until the Nation as a whole has firm legal assurances, binding on the State of Florida, and binding even on the Central Florida Flood Control District, guaranteeing the necessary water deliveries into Everglades National Park permanently.

Despite its merits, referred to above, the present proposal is distinctly inadequate with respect to the problem of guarantees, and it will be widely unacceptable to large segments of the American public, both inside Florida and across the land, until this deficiency has been completely corrected. ✦

[1] Paragraph "f" of the plan would deliver 315,000 acre-feet of water to the park yearly.

NATIONAL PARKS *Magazine*

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Front cover photograph courtesy Florida Game and Fresh Water Fish Commission: Wallace Hughes

Over the years the American people have either unwittingly or carelessly consigned some 48 species of native animals to extinction. Some of these have been small or obscure forms of life, whose passing has attracted only the attention of the naturalists and scientists; others have been the cause for later widespread public regret, as was the case with the passenger pigeon. Despite a vastly increased public interest in the protection of native American animals, some 78 species of mammals, birds, reptiles, amphibians and fishes are today carried on the Government roster of endangered American species; among these is the American alligator, an interesting reptile whose future is canvassed in this issue.

The Association and the Magazine

The National Parks Association is a completely independent, private, non-profit, public-service organization, educational and scientific in character, with over 35,000 members throughout the United States and abroad. It was established in 1919 by Stephen T. Mather, the first Director of the National Park Service. It publishes the monthly *National Parks Magazine*, received by all members.

The responsibilities of the Association relate primarily to the protection of the great national parks and monuments of America, in which it endeavors to cooperate with the Service, while functioning also as a constructive critic; and secondarily to the protection and restoration of the natural environment generally.

Dues are $6.50 annual, $10.50 supporting, $20 sustaining, $35 contributing, $200 life with no further dues, and $1000 patron with no further dues. Contributions and bequests are also needed. Dues in excess of $6.50 and contributions are deductible for Federal taxable income, and gifts and bequests are deductible for Federal gift and estate tax purposes. As an organization receiving such gifts, the Association is precluded by law and regulations from advocating or opposing legislation to any substantial extent; insofar as our authors may touch on legislation, they write as individuals.

Membership in the Association carries with it subscription to *National Parks Magazine*. School and library subscriptions are $5 a year; individual copies 50 cents. Letters and contributed manuscripts and photographs should be addressed to the Editor at Association headquarters. The Association is not responsible for loss or injury to manuscripts and photographs in transit. Return postage should accompany contributions. Title Registered U.S. Patent Office. Indexed in the *Reader's Guide to Periodical Literature*. Printed in the U.S.A. Second-class postage paid at Washington, D. C.

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California's Anza-Borrego Desert State Park:

A 488,000-acre public preserve of pastel colors, spiny plants, and timid animal life.

By O. F. Oldendorph

Photographs by the author

ANZA-BORREGO DESERT STATE PARK in southern California is a park that is "used" by its visitors. In most parks, visitors are admonished to stay on established roads, to park their cars in specified areas, to camp in designated camp grounds, to do this and not to do that. There are some areas of Anza-Borrego where similar restrictions apply; but visitors to this 488,000 acres of desert wilderness are granted unusual freedom in their activities.

Anza-Borrego Park is situated about 80 miles east of San Diego, in the rain-shadow of the Laguna Mountains. The mountains wring most of the moisture from the air that sweeps in from the Pacific Ocean, and rainfall in the park averages a scant five inches per year. It is a land that can be frightening to the uninitiated, with its bare mud hills, slot-like canyons, sandy dry-washes, spiny plants, and 125° summer temperatures. For those willing to linger and know the desert, it is a land of infinite beauty in pastel colors, timid animals, rippled sands, bright sun and long shadows, unbelievable wildflowers, and silent, start-studded nights.

The park offers an almost infinite variety of desert landscape. The Pinyon Mountain, Pinyon Ridge and Culp Val-

Coyote Creek is unusual in the desert country of southern California, flowing the year around. It rises from springs in the sand, flows for a couple of miles, and disappears into the desert floor. Along its course there are lush willows which are frequented by native bird life.

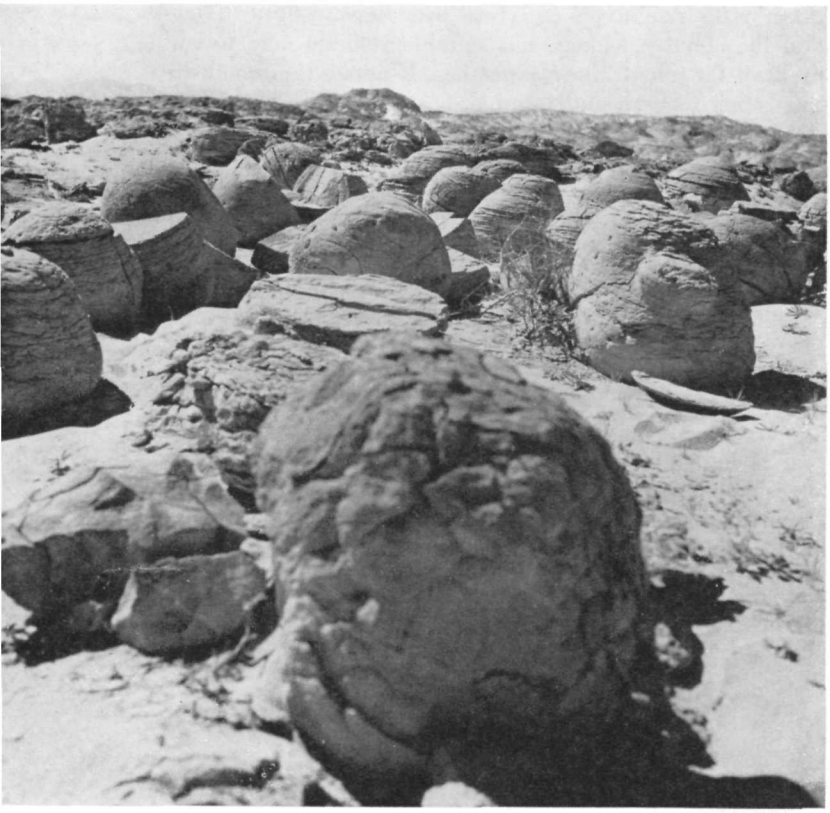
ley areas offer juniper and pine country, not without cactus, at altitudes near 4000 feet. Coyote Creek in the lower desert rises from springs in the sand, flows several miles and then disappears once more into the sand. Its course is marked by lush growths of willows that are home to countless birds. At other places in the park unexpected springs give rise to small areas of dense greenery or to groups of palm trees that stand with their feet in the water and their heads in the sun.

Font's Point overlooks barren badlands. No vegetation there hides the maze of steep-sided ravines which carry away the torrents that follow a rain. Farther east, Truckhaven Trail traverses deep arroyos, climbs the separating ridges and gives access to quiet, sandy washes that originate in box canyons on the southern flank of the Santa Rosa Mountains.

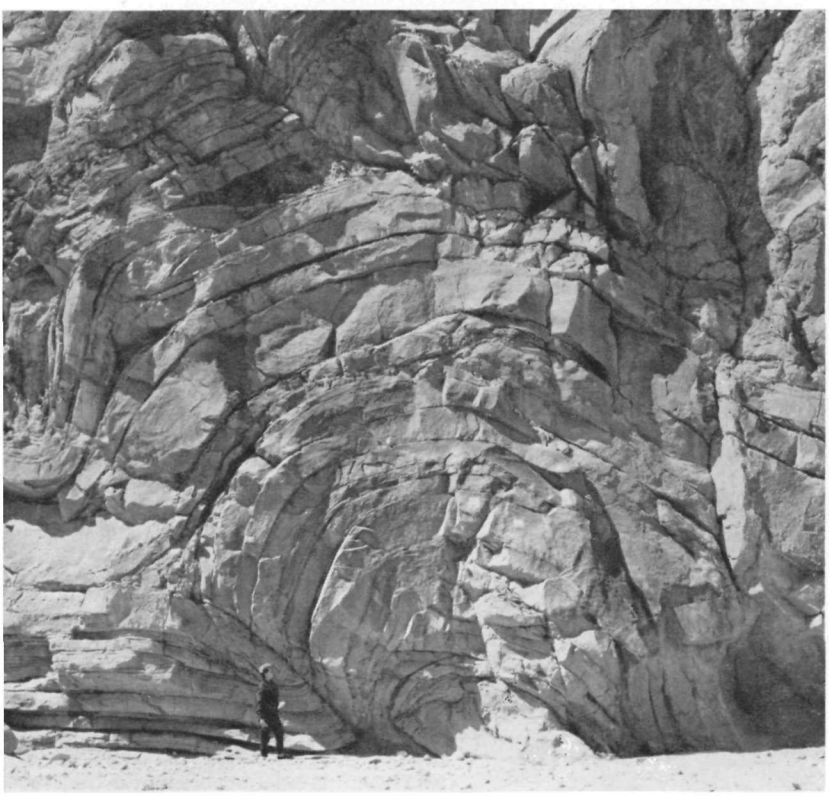
In the Fish Creek Area of the park the dry bed of Fish Creek traverses a mile-long canyon through Split Mountain. Sheer walls rise above the creek bed. Beyond Split Mountain the country widens, but suitable vehicles may follow the trail for about 20 miles farther. It passes the mouth of Sandstone Canyon and terminates at Hapaha Flats. Sandstone Canyon, a half-mile from its mouth, becomes so narrow that a jeep can scarcely pass between its vertical walls.

All of this is arid desert country. There is no mat of grass, of fallen leaves or pine needles, to absorb the impact of falling rain. There is little to hinder the flow of water down the barren slopes, and a rainstorm that in greener country would be considered a mild shower can be the source of a dangerous flow of water. The flash flood is a desert phenomenon, and a frightening thing. A rumbling wall of water carrying sand, boulders and uprooted plants can charge down a dry wash with alarming suddenness. But fear of flash floods need spoil no pleasant weekends in the desert. To be aware of the possibility of such occurrences is to be forearmed. Common sense dictates against long ex-

Below, the desert country of Anza-Borrego's Calcite Mine country. The array of whip-like branches in left foreground is an ocotillo, a spiny plant not of the cactus family. In spring its long wands are tipped with sprays of brilliant red flowers.



The Pumpkin Patch presents an array of almost spherical concretions that have weathered out of the desert floor, above. Below, Fish Creek Wash offers amateur geologists a classic example of an anticlinal fold which has developed a small overthrust (diagonal line sloping to right over head of park visitor).



cursions in narrow washes under unfavorable weather conditions.

In these entrancing washes and canyons a park visitor can find the quiet solitude of the desert, far from his nearest camping neighbor. Since the remote areas do not have established campgrounds, he is free to pick his own campsites. He must carry his own water supply, and forego the comforts of established camps; but a family group can find a closeness to the desert and to each other that cannot be equalled in a noisy, crowded campground.

Though he is free to set up his camp almost anywhere in the park, the camper must comply with certain rules. He must confine his vehicles to the dry washes. Dune-buggies, jeeps or trail scooters can badly scar the face of a hill and mar the beauty of the desert for decades. Though definite trails develop in the washes they are obliterated periodically by the flow of water that develops almost every year.

Since vegetation is sparse, gathering of firewood is forbidden. Ground fires are prohibited, since black scars of old campfires would detract from the natural light-hued beauty of the area. Gasoline stoves or charcoal braziers may be used.

Campers are expected to carry their litter to the trash containers that are located in even the remote areas of the park, and they are expected to protect its natural plant, animal, and geological features. Loaded firearms are forbidden.

The liberal camping policy, combined with the varied landscape areas, make Anza-Borrego Park a dream for the visitor who wants to go exploring on his own. Four-wheel-drive vehicles and dune-buggies afford means to get to the ends of the most remote canyons and washes. Some specific locations in the park are identified by signposts that sometimes include a map, but the dry washes and the trails connecting them over intervening ridges form an intricate maze-like pattern, and present a path-finding challenge.

In most areas of the park careful and patient visitors may be treated to the sight of desert animals. Though their numbers are not large, desert bighorn sheep frequent the higher areas. In the evenings the desert kit fox may often be seen in the washes on his nightly search for food. Ground squirrels are in abundance, and badgers and ringtail cats have been seen. In the late afternoon swifts dart among the mud-hill canyons in pursuit of their insect prey, and majestic red-tailed hawks sometimes quiet the twitterings of the swifts when they soar overhead. The road runner, member of the cuckoo family, is no stranger to this rugged terrain.

Plants of Anza-Borrego Desert

The plants of the desert are some of Nature's most interesting. Ironwood trees become a cloud of pink bloom in the early days of summer; the leafless smoke trees are covered with tiny, dark purple, pea-like flowers; and the palo verde makes a spectacular display of golden yellow flowers. Desert asters, marigolds, lupine, locoweed, primroses, mimulus, stately desert lilies and countless other flowers bloom in the spring. A wet winter is followed by wildflower blankets that change the desert into a fairyland of brilliant color. The plants mature, bloom, and produce their seed in a race to complete their life cycle before the

coming of summer's blistering temperatures. Seeds are dropped and may lie dormant for years until the conditions of temperature and rainfall call them to life. The cactus varieties—barrel, beavertail, cholla, hedgehog and fishhook—eke a living year around from the dry, rocky soil and produce their delicate blooms in summer. Yucca, century plant, and red-tipped ocotillo are common. The rare elephant tree may be seen at the end of a moderate hike through a sandy, rocky area that is unsuited for vehicles.

Geologic interest is stimulated by an abundance of concretions of weird shapes, petrified wood, erosion patterns, and calcite and gypsum deposits. Fossil oyster shells and other molluscs are common, and a number of discoveries of the fossil remains of larger animals have been made.

Human History of the Region

The park is not without historical interest. At Christmastime in 1775, Colonel Juan Bautista de Anza and his party passed through what is now part of the park. Anza was leading a group of Spanish settlers, men and women, from Santa Fe to the settlement of San Francisco. During the Mexican War, General Kearney and his men traversed the area on their march to secure California for the United States. Later, the Mormon Battalion followed the same general route and hacked a trail from the rocky side of a shallow canyon for their wagons. That trail is still visible on the side of Box Canyon in the southern section of the park. Later yet, the Butterfield stages passed through the area, as did thousands of emigrants on their way to the promised land of California. The old adobe Vallecito Stage Station of Butterfield days has been reconstructed at its original location in a county park immediately adjacent to Anza-Borrego Desert Park.

While Anza-Borrego affords opportunity to camp in primitive areas, visitors may also choose to stay in modern and well-developed campgrounds. Three areas are equipped with as many conveniences as may reasonably be expected on a camping trip. Toilets, showers, laundry facilities, drinking water, gas stoves, shelters and storage cupboards are provided. A nominal nightly fee is charged for the use of the improved camp areas. From these campgrounds, rangers and naturalists escort visitor groups to points of natural interest, and evening interpretive programs are held during the visitor season.

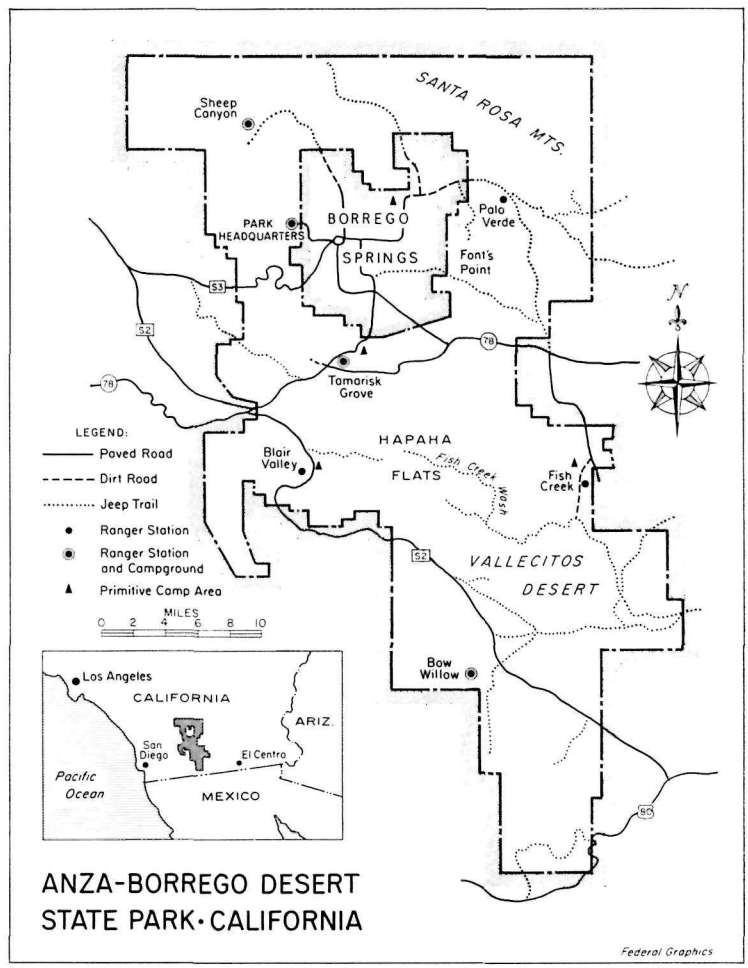
Unlike most camping recreational areas, winter is the time of greatest use of the desert park. High summer temperatures in an extremely dry area discourage visitors who are able to find cool comfort in the coastal areas of the State. But during the winter months—from about the beginning of October through April—the desert is delightful. Usually the skies are clear and the sun warm, though there are welcome days of overcast, clouds, and rain. Winter nights are nippy and make one appreciate a heavy sleeping bag.

Anza-Borrego Park is the largest unit in the California State Park System. The state park idea was born in California when Abraham Lincoln signed an act of Congress giving Yosemite Valley and a grove of Giant Sequoias to California. Later, when Yosemite National Park was established, these areas were returned to the Federal Government for inclusion in the national park. Interest in the preservation of the giant redwoods of California sparked conservation efforts of citizens which were recognized by the establishment of a California State Park Commission in 1927. In the same year the Division of Beaches and Parks was established in the Department of Natural Resources.

Today the state park system includes 174 units and encompasses 725,000 acres; Anza-Borrego Desert State Park accounts for over 488,000 of these. That the desert provides recreational opportunities is attested by the 1964-65 attendance in Anza-Borrego of 382,000 persons. This was not the largest attendance recorded in the state park system; many of the more heavily visited areas were State Beaches and other "water" areas close to the metropolitan centers.

Seven ranger stations are scattered through Anza-Borrego, including park headquarters near the town of Borrego Springs. Some of the stations are quite remote. That in Sheep Canyon can be reached only by a jeep trail that traverses the bed of Coyote Creek for a considerable distance. Rangers are versatile outdoors men who maintain, patrol and police their areas. Routine patrols carry them over many miles of back-country trails in their four-wheel-drive vehicles. Weekends usually find them in the more

Below, the locale and boundaries of the Anza-Borrego Desert State Park. Boundary lines have been simplified somewhat in this map; actual lines follow sections of land and are extremely irregular.



accessible areas of their domains where the largest numbers of visitors are encountered. Here they conduct evening campfire programs, answer questions, and provide trail information. They stand ready for first aid or search-and-rescue missions at all times.

Through contacts with visitors in their areas, rangers usually learn of the activities that the visitors have planned for their stay in the park. This is definitely to the benefit of the visitors. It is reassuring for them to know that the ranger is aware of their general whereabouts, and that he will investigate should there be a significant delay in their return from a remote or untravelled area.

Keeping an Eye on Visitors

Rangers develop "tricks of the trade" in keeping track of visitors, and one of the most useful is that of "cutting the washes." Many desert dry-washes terminate in narrow or rocky box canyons; one must come out by the same path by which he entered, and such washes are usually tributaries to larger washes. In "cutting a wash," the ranger drives his patrol vehicle across the mouth of the tributary wash so that it is impossible for another vehicle to enter the wash without driving over the ranger's tire tracks in the sand. Later checks will show if visitor vehicles have gone up the tributary wash, and also if they have returned.

Rangers are able to cooperate readily with each other and to exchange pertinent information by way of the short-wave radios with which all patrol vehicles are equipped.

Thousands and thousands of people who battle the traffic, noise, and frustrations of a city existence find quiet and weekend relaxation in Anza-Borrego Desert State Park. These people have learned that most of the terrifying tales that are heard about the desert are not true. It is not a place swarming with venomous snakes and malicious insects; it is not a trackless waste of sand where one wanders aimlessly in circles; it is not a lifeless landscape. They have learned to know and to respect the desert as a place of quiet; a place where they can be alone with their thoughts; a place of gentle color and many pleasant surprises. ■

Within the park there are relics of earlier inhabitants. The circular ring of stones below was probably part of a primitive brush shelter.

At right, mud palisades in Fish Creek area of park. The deep grooves were cut into cliffs by running water, creating a favorite area for swifts.

Recreation Needs in Urban Areas

By Robert C. Weaver

Secretary,
Department of Housing and Urban Development

THE NEED FOR RECREATIONAL FACILITIES is today widely recognized. Very few people in our enlightened age are against national or city parks, or playgrounds for children, or the theory of preserving land for future use.

But we do need better understanding of urban recreation needs. Though four out of five of us today live in urban areas, we still think of recreational outlets largely in terms of our rural values. To be sure, hunting and fishing and camping mean recreation to great numbers of our people for whom they are escape from the pressure of work and a change in the routine of daily life. Many of us think of the ultimate in peace as floating down the Mississippi on a raft, or breathing the air of a high mountain trail, or picnicking beside a clear stream.

This rural-oriented recreation, to which most of our interpretive programs and much of our recreation budgets have been directed, does not, however, serve the needs of central-city people. It is excellent, of course, but it omits consideration of these facts:

Conventional recreational facilities are not available to all the people of the city. Many low-income families, particularly those in isolated and impacted urban ghettos, are simply not mobile enough to reach them.

Many people in cities are not interested in outlying recreation areas or the traditional rural concepts of recreation. Thus, we cannot restrict the development of recreation facilities to outlying areas. We must think of a pattern of living in which opportunity for recreation, rest, and relaxation is available to all citizens in every walk of life. We must consider the urban citizen who by choice wants his recreation within the city.

We must, in particular, consider the pressing need of the low-income families living amid the congestion, noise, drabness, and unbroken monotony of asphalt and brick characteristic of the deprived areas of our cities. Here, obviously, we have the greatest deficit of green space and recreational facilities. Were these available, they could take our young people out of the alleys and off the streets which constitute the only outdoor space in the city's core.

Finally, we must think of the city itself as a living environment; a frame worthy of our people; as a place that can give reality to that goal of quality in the lives of our people which President Johnson stressed in his historic message on natural beauty.

Are recreation planners doing enough to meet the needs of the city's people? Certainly there is a great ferment of thinking at a number of levels and in a number of places. City recreation planners are breaking away from the concept of a city park as a green spot with a man on horseback in the center and a peripheral sidewalk. They are planning parklets and portable parks. They are beginning to lease vacant lots, and develop parks in tandem with neighborhood centers. They are talking of using roof tops and elevated platforms, and of trenching and covering freeways for recreation use. They think of linear parks along transit lines.

They realize this: that the demand for recreation land is insatiable. As long as we can foresee, the supply and demand imbalance will be very large indeed. When we think in terms of one million acres of new land going into urban development each year, then we realize the extent of the problem. Department of Housing and Urban Development programs, taking new directions, have progressed to meet this problem.

Traditionally programs of Federal aid for housing and community development envisioned space for recreation. Public as well as FHA-insured private housing developments have included outside and inside space to accommodate various recreational activities. Community facilities projects also provided for some forms of recreation.

To this have been added two programs that deal directly with the acquisition of land needed for recreation purposes, and with the beautification of the city.

Open-Space Program Initiated

The Housing Act of 1961 initiated the open space land program. It authorized grants up to 20 or 30 percent to state and local governments toward the purchase of land for park, recreational, conservation, historic or scenic purposes. Subsequently, thousands of acres of land were preserved for these wide-ranging uses. There are a number of outstanding examples of the statute's effectiveness, particularly in the preservation of traditional recreation lands.

For example, it helped develop a green belt around Chicago. It helped preserve the Rock Creek watershed in the

Washington, D. C., area. It helped retain land in the Santa Monica Mountains in Southern California, thus preserving space for posterity in the fastest-growing part of our nation. And these are only a few of the major area-wide programs which were aided.

These grants provided incentives for metropolitan planning and helped lead to the formation of meaningful regional compacts. They helped create a desirable pattern of urban development by breaking up continuous sprawl, by creating boundaries between communities, and by curtailing development on lands ill-suited to residential and commercial use.

In 1965, the 89th Congress increased the grant amount to 50 percent, and took the further step of extending the program to include acquisition of land in impacted urban areas. We could now help States and localities acquire developed land in their built-up neighborhoods, clear it, and put it to open-space recreational uses.

The Urban Beautification Program

The 1965 Housing Act, with the full support of the President, also gave us the Urban Beautification Program. This authorized 50-percent grants to States and local governments, in the language of the statute, for "the greater use and enjoyment of open spaces and other public land in urban areas." It means grants for such things as pedestrian malls, the improvement and development of in-city parks, the purchase of street furniture, and the landscaping of public places.

In built-up portions of the city, this provides new means of opening up and ventilating congested neighborhoods. It means that in both city and suburbs, space can not only be acquired, but be developed as well.

By the beginning of 1967, 55 communities across the nation had beautification projects under way with support of more than $9.2 million under this program. The projects ranged from the improvement of parks and green space in declining, congested neighborhoods, to making transitways attractive instead of ugly.

Under the open space program, about 200,000 acres of urban open space land has been purchased by communities in 41 States with Federal funds amounting to over $54 million.

This is a new emphasis. It recognizes that we are bringing back to the city the kind of environment that lifts the spirit. It is a new orientation toward meeting the recreation needs of those who prefer to stay in the city—or those who cannot escape it.

As in all our most effective urban programs, demand for the open space and urban beautification program constantly exceeds supply. We have had to develop a system of selecting the best from a number of useful applications. In that process we have come to these tentative conclusions:

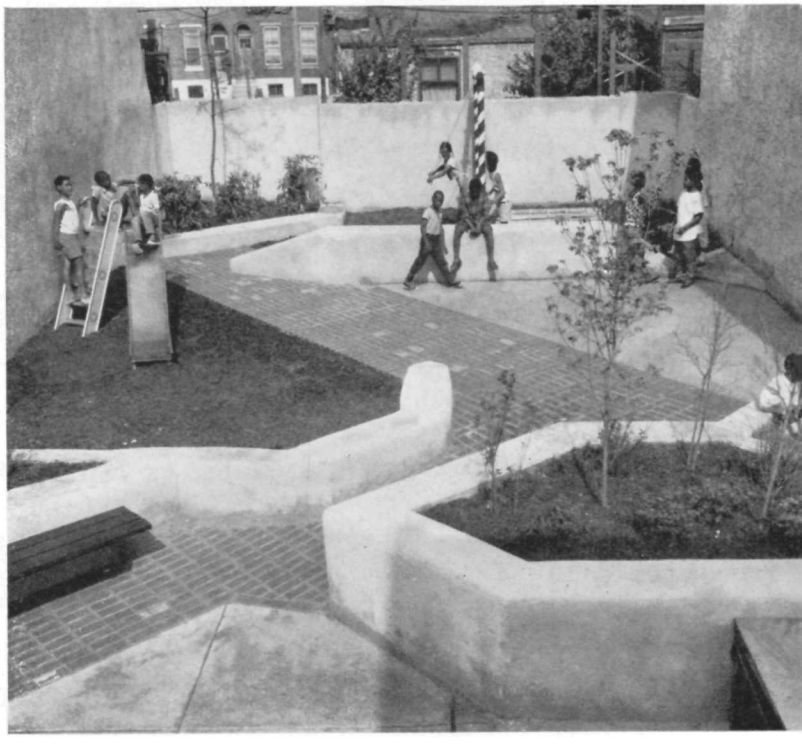
1. It is imperative that lands to be acquired not only be compatible with efficient land use in a metropolitan area,

This article will be a chapter in a forthcoming book of essays on urban open space, to be edited by Whitney North Seymour, Jr., of the Park Association of New York City, and published by the New York University Press.

City of Philadelphia Records Dept.

Under terms of the Housing and Urban Development Act of 1965, the Department of Housing and Urban Development is authorized to make grants to States and local public bodies to assist in the acquisition of developed land in built-up portions of urban areas to be cleared and developed for open-space uses. The "before and after" pictures on this page show what the City of Philadelphia has been doing in converting decaying properties and vacant lots into spaces that can take young people out of the alleys and off the streets.

City of Philadelphia Records Dept.



but serve as a key to such use. This is a logical refinement when applications so far overreach our resources.

2. We must pay attention to variety of purposes in land acquisition in particular cities or areas. Is there a balance of parks, or recreation properties of conservation projects?

3. Difficult as it may be, we must consider cost effectiveness.

There are many alternatives. In programs which allow so many options, we work closely with state and local governments to meet urgent needs and expend our resources in a fair and prudent fashion.

This process is, in fact, a useful exercise for us all. It can apply to state and local as well as Federal endeavors. Perhaps the time has come to look at our urban areas in terms of needs rather than demands. We must give particular emphasis to the needs of the low-income, the old, and the disadvantaged in the core city. They have not had a fair share of recreation resources, as they have not shared fully in decent housing, or full employment, or good education.

Strictly recreation programs are not the only programs that contribute to the recreation needs and beauty in urban areas. The urban renewal program, particularly with its new emphasis and programs for rehabilitation and code enforcement, is making vital contributions to meeting open space needs. So do programs for preserving historic buildings and areas. The neighborhood facilities program helps meet recreation and other social needs in low-income areas. Planning grants help develop the framework for growth and renewal. HUD not only makes mass transit grants, but grants to help beautify transitways.

Other Departments and agencies have major programs which are meaningful to recreation needs. The States are becoming increasingly involved—many now have open space and beautification programs.

The Federal programs can be used in conjunction with one another, and in fact are designed to do just that. It is obvious that state and local programs have always been used in conjunction with Federal programs.

The Qualities of City Life

Man does not live by bread alone. Recreation and beauty and the leisure to enjoy them are necessities. Every city can document for itself and its citizenry clear and unequivocal design of how the city should look and live and feel and breathe. Such design, for every part of the city, would preserve the unique terrain and views, the beloved landmarks, the historic open space, and maintain sensitive

City recreation planners are departing from the time-honored notion of an urban open space—a bronze statue with its inevitable low picket fence of iron castings and its peripheral concrete sidewalk—and are thinking in terms of spaces like the mall below in an Atchison, Kansas, urban renewal project.

Department of Housing and Urban Development photograph

guidelines for the height and volume of new construction.

This design would search out and enhance the special qualities of each neighborhood; it would indicate in no uncertain terms the amenities and facilities needed at community and city scale to provide the good life. The design would mean small parks, squares, and malls strategically located to "ventilate" densely developed areas. It would offer places to rest, converse in comfort, and provide a focal point for upgrading and maintaining the quality of the surrounding area. Cities which presently provide such areas are known the world over for their beauty and vitality.

The design would rescue areas that have been nearly lost, or hidden, by incompatible development or encroachment. Too often—in towns and cities of all sizes—gracious older public buildings and historic sites have lost much of their attractiveness and accessibility due to their surroundings. Waterfront areas, in particular, tend to suffer from such development. Creating parks and similar open spaces in these situations can highlight and enhance these areas, foster community pride, and substantially increase the value and utility in older residential areas which, though well-planned and livable, often lack open space.

City and county budgets—even with the help available from the Federal programs—are strained to the utmost in attempting to meet the recreation and open space needs that exist now. So the thought of the needs that will exist tomorrow sometimes seems overwhelming. Yet it is essential that we do look to tomorrow's needs if we are to succeed in meeting them better than we have those of today.

Immensely valuable recreation and open space could be created by reclaiming and bringing to life wasted space in congested urban areas. Common areas of green open space could be achieved by the assembly and constructive use of neighborhood backyards that now harbor only rodents and garbage. Such common areas are a feature of new planned-unit or cluster housing developments; why not adapt it to existing housing?

Some Projects in Creative Planning

The examples are many. New York's own program is notable. Its "portable park" project is one new direction in creative planning. This is turning vacant lots into children's play areas with specially-designed equipment that can be modified or moved as the growth needs of children and the neighborhoods change. The Jacob Riis Houses, on the lower East Side, where this idea has been pioneered, already serves as a model and pilgrimage point for other cities interested in new ideas in recreation. Vest-pocket parks are springing up in spaces between buildings cleared of rubbish and developed as sitting-out areas. Parklets are planned as part of a neighborhood's rehabilitation, since properly located and well designed open-space areas encourage and support rehabilitation efforts. Moving out from the city's core, an ocean-front beach and park, readily accessible via public transportation, is being developed at Rockaway in Queens Borough.

Philadelphia is transforming several hundred publicly-owned vacant lots into vest-pocket parks in congested neighborhoods where recreation and green space have been missing, an example of how cities can be opened up with parks and pedestrian areas where people can move about and breathe freely. Boston is rehabilitating its waterfront, among other endeavors. Johnson City, Tennessee, is developing a neighborhood park for picnicking, tennis, and swimming. Salem, Oregon, is developing three neighborhood parks. In Cobb County, Georgia, 86 acres are being developed with an athletic field, playgrounds, picnic areas, landscaping, and trails.

Henry David Thoreau wrote: "It would be worthwhile if in each town there were a committee appointed to see that the beauty of the town received no detriment."

Broadly speaking, beauty should include not only trees and parks, but the design and architecture of buildings and blocks and entire urban neighborhoods. It should encompass a livable metropolitan America; an environment, in other words, of health and beauty which reaches into the urban core and outward again to the open country.

Though it is too late for the preventive measures Thoreau advocated, we do today have both the organizations and the programs to correct our mistakes and take preventive measures for the future. ■

In some urban redevelopment projects malls and parks are being developed in close proximity to downtown areas and neighborhood centers. The mall below is in the business district of Fresno, California.

The Tidyman Studios, Fresno

Hide-hunting and loss of natural habitat shadow the future of a big native reptile

THE AMERICAN ALLIGATOR

By Arthur P. Hutt

SOME 120 MILLION YEARS AGO, BENEATH the bellies of the Goliaths of that period, there slithered in the Mesozoic mud a 60-foot phytosaur which looked strangely similar, save for length and bulk, to the modern-day members of the Order Crocodilia.

The fact is that, except for considerable shrinkage in dimensions, our alligator and its cousins are practically the sole reptilian survivors—the giants died out about 70 million years ago—of those days of earth's antiquity.

There are still about 20 alligator types in the warm parts of the world. Head shape divides them conveniently into three groups: the broad heads, or alligators and caymans; the pointed heads, or the crocodiles; and the narrow heads, or gavials.

The slender-snouted gavials live in the rivers of Sumatra, Borneo and India. Some sects of Hindus regard them as sacred. And, although they grow to 26 feet, they are considered harmless, with long, slender jaws best for grasping fish, not humans. The gavial has another distinction; it is thought to be the oldest of all the air-breathing vertebrates.

The crocodiles—all ten varieties—are less peaceful. The American crocodile, *Crocodylus acutus*, grows to 14 feet, is aggressive and quick compared to the alligator, shows its fourth tooth in a constant grin, and is found in the brackish and salt waters of South Florida, South America, and the West Indies. The up-to-20-foot crocodiles of the Malayan Peninsula, East Indies, and the Nile are truly hostile to humans, and attacks are not uncommon.

Yet the Nile reptile held some rank with the ancient Egyptians, who constructed temples in its honor, placed linen-wrapped, embalmed crocodiles in their tombs, and made various designs and carvings in a crocodile pattern. This saurian was mentioned by the historian, Herodotus, and described by Aristotle.

The cayman, a native of South America, closely resembles the alligator but has armored scales on its belly. It is common along the Amazon, grows to well over 20 feet long, and is not considered dangerous to man.

The Animal Described

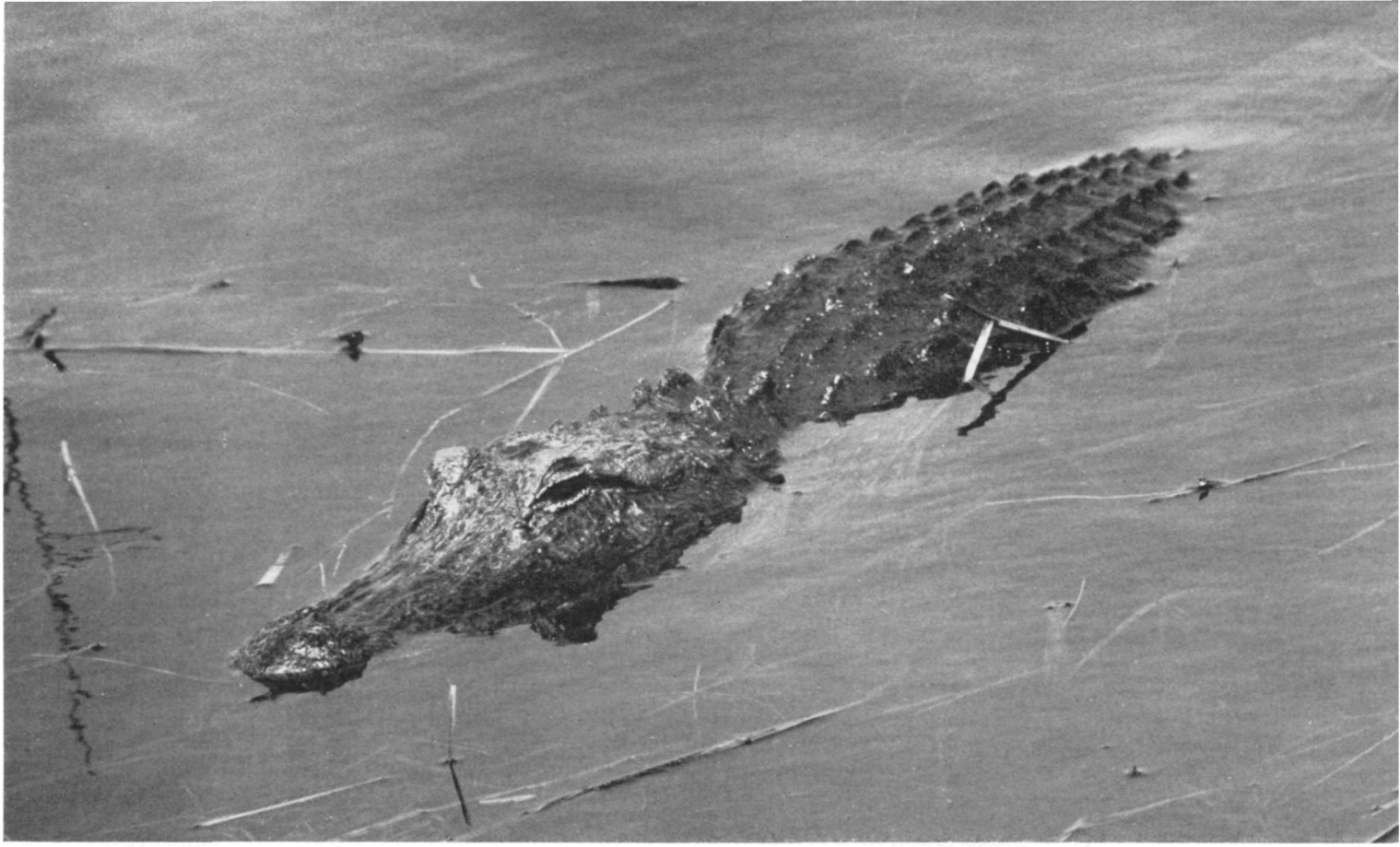
The American alligator fits into a niche all its own. *Alligator mississippiensis* is usually less than 12 feet long, has enclosed teeth, and while basically black with lighter underparts, it usually has some hint of yellow markings, vivid in young 'gators but fading out with age.

The reptile inhabits those southeastern States between the Rio Grande and North Carolina. It is most common in Florida, particularly in the 2100-square-mile Everglades National Park area. Florida Game and Fresh Water Fish Commission biologists estimate the state's population at around 200,000. Louisiana appears to be the second most alligatored State. Counting noses with any accuracy is difficult, however, because of the inaccessibility of habitat and shyness of the animal towards intruders.

The timidity of the 'gator is well known to the people who work around it in the wild. At the first sign of a human, it will sink beneath the water or slide from its basking spot. Which, in truth, is quite unlike the picture painted of it by TV, magazine articles, and wild-eyed newspaper accounts. For, what better way is there to dispatch a villain, test the mettle of our hero in an underwater battle with the armored destroyer, or keep the reader's eyes glued to the page? The savageness of this saurian has been both abused and over-used. Realistically, a few bubbles would mark the spot where the alligator avoided such a commotion.

This is not to say that the alligator is not equipped to take care of itself. Big bull 'gators have a reputation for short tempers, and a female guarding its eggs or young provokes quickly. A sweep of an alligator's tail can break a human arm or leg, or direct an unsuspecting lesser prey to the animal's jaws. The alligator shows remarkable ability in flexing its body from stem to stern; in one quick move its teeth can be where its tail was.

Despite the rough, armored exterior, the alligator is the only one of the reptiles (snakes, turtles, lizards) which shows a tender concern for its youngsters. In early spring, a mature male 'gator stakes out its territory and commences to bellow to attract a female. In a younger 'gator, the sound is merely a roar; but in a full-grown bull, the noise resembles a roll of B-flat thunder. (Not infrequently, an Everglades alligator will answer a low-flying jet.) Along with the sound, two paired glands in the upper jaw release a female-attracting scent. Once the mating is accomplished, the male resumes its



Florida Game and Fresh Water Fish Commission

The alligator is well adapted to life in the water. Ears and eyes have protective skin tissue for underwater travel, and the snout-positioned nostrils connect behind a throat-sealing skin flap to allow open-mouthed breathing at surface.

bachelor habits and leaves the burden of perpetuating the species up to the female.

Laboriously the female builds a nest on an above-water site—usually near or under the semi-protection of a tree or palmetto bush—uprooting cattails and other vegetation and mounding the whole into a circular pile about two feet high and four to seven feet in diameter. In May or June she deposits 20 to 60 eggs, more oblong and slightly larger than a chicken's.

Heat from the sun and from the decaying mass of moist vegetation keeps the eggs at an ideal incubating temperature. Some say that mama 'gator will even carry a mouthful of water to the nest if she senses that it is drying out. And, at nest-guarding time, the female alligator is particularly ill-disposed toward any intruders, attempting to guard the nest from bears, raccoons, snakes, and humans (years ago, alligator eggs were considered a delicacy). In early fall, the tightly-coiled baby 'gators tooth themselves out of their egg prison, signalling their mother with an "oink" that brings her running to clear the debris from the top of the nest. The youngsters immediately head for the water, escorted by their mother.

At this time, despite the presence of their protecting parent, the tiny 'gators, about eight inches long and weighing about two ounces, may fall prey to a variety of wildlife. Hawks and crows attack from above, wading birds stab at them from waterlevel, and a lunker-sized bass will gulp them from underneath. Even a male alligator is not above gobbling its own kin. At this tender age, the young 'gators already have teeth capable of drawing blood from an unsuspecting human finger. They busily forage for insects, small minnows, and crayfish. Their mother will frequently treat them to a large-sized gar or bowfin, holding it while the little ones assemble and tear at it.

Dimensions of the Alligator

Alligators in the wild grow fairly rapidly—from 12 to 18 inches a year, at first. The growth rate slacks off when sexual maturity is reached, usually in the sixth year when the 'gator is from five to seven feet long. A full-grown female, the smaller of the species, commonly reaches nine feet and 160 pounds. The male, with exceptions, spans 12 feet and weighs around 500 pounds. At this size and bigger, he is the fellow most capable of causing trouble. He is even hostile to his own species, tending to eliminate or run off the younger breeding males.

In food habits the American alligator is less than particular. It will scavenge the most rotten of foods, and has an affinity for the "slow-movers" such as garfish, bowfins, and turtles; the latter it can crush, swallow whole, and digest, strong stomach acids taking care of the shell. Even with a formidable array of up to 80 teeth an alligator does not chew—it crushes. One Florida biologist discovered a whole armadillo in a ten-footer, smashed as flat as if a truck had run over it. In effect, it had; for a big 'gator's jaws can close with a thousand pounds of pressure. While an alligator ordinarily attacks bite-sized meals, when it grabs something too big to swallow it twists its big body rapidly in

the water until a mouthful tears off.

The animal is well-adapted for aquatic life. An unusual anatomical feature is the fleshy flap at the base of the throat, which prevents water from entering the stomach. To swallow food the 'gator elevates its throat above water, the flap opens, and the food slides down without a mouthful of water. The nostrils, well forward on its snout, empty behind this flap so that the 'gator can breath with its mouth open. The ears, too, have a water-tight skin covering, and eyes are protected by a colorless membrane.

Alligators were once so numerous throughout the Southeast that Calusa Indians in the 16th Century—although they used smoked "allapawta" as we do hamburger—had to "guard their camps at night" from marauding alligator packs. Exploring Spaniards wrote of the indestructibility of the armored, man-eating *el lagarto*. William Bartram, fearless Quaker naturalist who in 1791 travelled along Florida's "St. Juans," at one place said he saw alligators "in such incredible numbers that it would have been easy to have walked across their heads had the animals been harmless."

Alligator hunters started reaping a bonanza after the mid-1800 discovery of a tanning process which made fashionable various alligator-hide accessories. With guns, spears, clubs, and hooks, commercial 'gator hunters scoured the swamps, harvesting the unwary animals. A popular hunting method was to use a light at night, to pick up the orange glow of a 'gator's eyes. The light seemed to hypnotize the reptile, and the rest was easy. Experienced hunters could accurately estimate a 'gator's length by the width between its two shining eyes. "Sportsmen" and commercial alligator hunters chartered small steamers, like the *Mary Draper* on the St. Johns, returning to dock with decks and rigging festooned with dead 'gators, while the young were caught to sell for souvenirs.

At the turn of the last century a ten-man crew working the Cocoa (Florida) area took 2500 hides in one year. At nearby Fort Pierce, 12 men took 4000 hides in a year. Tanneries in the Southeast processed 280,000 skins valued at $420,000 during this turn-of-the-century period. In Florida alone, one source indicates that between the years 1800 to 1900, more than three million alligators were harvested!

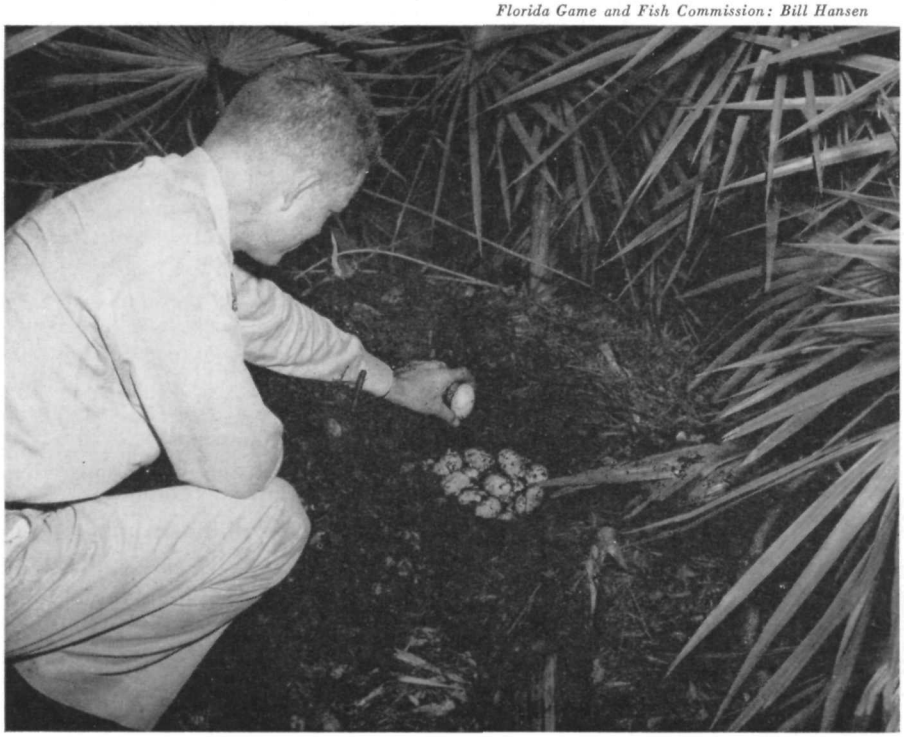
Fortunately, the individual southeastern States saw that something had to be done or the alligator would be completely annihilated. Florida, for example, started in 1944 by protecting the 'gator during its breeding season. Six years later an over-eight-foot, by-permit-only season was reopened. Still the kill (18,735) was too great, and a completely closed season followed.

Then new complications arose. Poachers reached a new height, killing about 50,000 alligators a year and selling the hides for a million dollars. With the Game and Fresh Water Fish Commission enforcement officers not able to do an effective job because of the huge expanses of watery land involved, particularly in the Everglades area not included in the national park, Florida is now considering a restricted season with a fairly "stiff" license fee to keep out the "thrill hunters." Commercial hunters would hopefully "police their own ranks" and pay a per-foot tax on hides, with the revenue turned in to help finance further research on the alligator. There is, in Florida, an extensive research program under way aimed at collecting information leading to feasible harvest regulations.

On the other hand, many American conservationists think that there should be a complete moratorium on commercial and other killing of the animal, pointing to the Fish and Wildlife Service opinion that it is an endangered American species of reptile.

An alligator nest, tucked under a streamside palmetto, consists of a moist mound of vegetation. The decaying process which takes place in the mass of vegetation generates sufficient heat to incubate the eggs, of which the female 'gator lays up to 60. The eggs are like those of a chicken, but more elongated and slightly larger; incubation takes several months. The baby alligators are about eight inches long and weigh about two ounces when they pick their way out of the eggs.

Florida Game and Fish Commission: Bill Hansen



A Necessary Predator

Even though sadly maligned, the alligator has much in its favor. By its scavenging activities it is a "sanitary engineer." Ross Allen, world-famous alligator expert, terms it a "necessary predator," helping to keep roughfish and turtles under natural control. Many old-time fishermen associate good fishing with the presence of an alligator or two, believing, like Allen, that its presence and appetite help keep the rough-fish population in bounds. Its habit of building " 'gator holes" during dry weather, particularly in the Everglades, creates places for fish to survive as brood stock against the time when water levels rise again.

But the greatest value of the alligator, especially in a tourist State like Florida, is the unmeasurable value of its mere presence in the wild. Over 50,000 people a year pay to get into one of Florida's bigger alligator farms. But still, the sight of a wild alligator in a roadside canal, or on a riverbank, is often the highlight of a Florida trip.

However, the alligator continues to be relentlessly persecuted, through a popular devotion to inaccurate dogmas, misunderstanding, and through the destruction of its habitat. While it is true that the alligator has a fondness for dogs (owners should keep better track of them!), it is untrue that it attacks unless unnecessarily provoked. In a survey of the southeastern States conducted several years ago, there were no recorded human deaths attributed to this animal.

The fact is that people cause trouble, not alligators. The most popular complaint to Florida enforcement officers stems from people feeding alligators at their canal or lake. A slow-witted alligator will never make a pet; but people are not convinced of the fact. The animals can be attracted by food, however. So, at first, it is "cute" to have a small alligator respond to a handout. But as the alligator grows and becomes less afraid of humans, it may take a swipe at the hand that feeds it, at the neighbor's dog, or at feeding time it may even begin to meet its well-intentioned benefactor half-way, lolling in the flower garden between feedings. Suddenly the reptile is no longer "cute," and a hurried call goes in to the Commission about killing or removing the "menace." (In most cases, alligators are live-trapped and moved into the hinterlands).

We are managing to strip the alligator of his home, his solitude, his dignity. Thanks to adroit film editing and to contrived situations, the alligator, which only wants to be left alone, is still promoted as a threat to human life and limb.

This unusual animal link with the earth's dim past is one of the facets of the American scene that surely deserves better treatment than it has received so far. ■

Mother alligator is the only reptile which guards its nest and young. In the photo below, mother is submerged save for eyes, while five young 'gators, striped at this age, forage among the aquatic plants at lower right.

Florida Game and Fresh Water Fish Commission: Bill Hansen

News and Commentary

Southern Utah Park and Monument Hearings

Public hearings have been scheduled by the National Park Service on its plans for wilderness areas in four park system units in southern Utah. The units are Bryce Canyon National Park, and Arches. Capitol Reef, and Cedar Breaks national monuments.

Dates and places are:

For a 4600-acre wilderness in Cedar Breaks Monument, December 11 at 9:00 A.M., in the Library Lounge of the Library Building, College of Southern Utah, 3rd West and West Center Street, Cedar City.

For a 17,900-acre wilderness in Bryce Canyon Park, December 11 at 2 P.M., in the Garfield County Court House, 55 South Main Street, Panguitch.

For a 23,074-acre wilderness in Capitol Reef Monument, December 12 at 10:00 A.M., in the Wayne County Court House at Loa.

For a 12,742-acre wilderness in Arches Monument, December 14 at 9:00 A.M., in the Council Chambers, City-County Building, 121 East Center Street, Moab.

Interested individuals, representatives of private organizations and public officials may express their views in person at the hearings by notifying the hearing officer no later than two days prior to the hearing, in care of the Superintendent of the particular park or monument. Written statements from persons unable to attend the hearings will be included in the hearing records if they are received by the Superintendent within 30 days after the hearing dates.

Addresses of the Superintendents of the units involved are: Cedar Breaks National Monument, Springdale, Utah 84767; Bryce Canyon National Park, Bryce Canyon, Utah 84797; Capitol Reef National Monument, Torrey, Utah 84775; Arches National Monument, Moab, Utah 84532.

Washington Hearings on Public Land Problems

The final regional meeting of the Public Land Law Review Commission's current series will be held in Washington, D.C., on January 11, 1968, the Commission's chairman, Rep. Wayne N. Aspinall, has announced. The Commission, established by Congress to study all public laws and the regulations and procedures of Federal agencies administering those laws, will eventually recommend policies which it feels will enable the public to realize the maximum benefit from the public lands. During recent months the Commission has been engaged in such public meetings in various regions throughout the country, and has so far taken the views of some 750 public witnesses.

The Washington meeting will be held primarily to hear representatives of national organizations, the Chairman has indicated; but the views of individuals desiring to testify, and who have not already done so, will also be welcomed. Those desiring to submit their views on public land problems should make their requests promptly to the Director, Public Land Law Review Commission, 1730 K Street, N.W., Washington, D.C. 20006; they should be prepared to furnish the Commission with 25 copies of their statements. Witnesses will be required to file their statements and limit their oral presentations to brief summaries of their arguments.

Protection for Some Texas Animals

The Texas Conservation Council points out that Texas will henceforth protect the horned toad and the Texas tortoise from commercial exploitation. These animals have in the past commonly been sold to tourists as souvenirs (and, in the case of the horned toad, made into paperweights and other bric-a-brac for the tourist trade). In addition, the Council notes, the pelican and the duck hawk have been removed from the list of unprotected birds in the State. Also, the American alligator has received protection from hide-hunters within its range through the State's eastern and southeastern counties pending completion of alligator studies in 1970. (Ed. note: a Federal measure now being considered would make interstate traffic in alligator hides illegal).

Possible Biological Control of Western Pine Beetle

The bark beetle's mating habits appear likely to lead to his destruction, says the Department of Agriculture. Two California scientists, supported in their research by the Forest Service, have recently reported another milestone discovery in the campaign against the Western pine beetle.

The Service reports that Dr. David L. Wood, of the University of California, and Dr. R. N. Silverstein, of Stanford Research Institute, have synthesized a major component of the beetle's sex attractant. Forest Service Experiment Station scientists in Berkeley, working with Dr. Wood and Dr. Silverstein, indicate they next must determine the best methods of using the attractant to lead the insects to destruction.

Karl William Onthank

Karl William Onthank, nationally recognized conservation leader and emeritus professor of social science at the Univer-

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I certify that the statements made by me above are correct and complete: Paul M. Tilden, editor.

sity of Oregon, died on the morning of October 27, after an illness of several months. Mr. Onthank, often called "The Apostle of the Wilderness," had been a leader in the fields of conservation, recreation, and wise utilization of land and water for more than three decades.

He organized the Friends of the Three Sisters Wilderness and the Oregon Roadside Council, helped establish the Northwest Wilderness Conference while president of the Federation of Western Outdoor Clubs, and he was active in the founding of the Lane County Recreation Bureau.

A past president of the Oregon State Water Resources Board and the Oregon County Parks Association, he also served on the Advisory Board on Oregon and California Land Management of the Department of the Interior and the Waldo Lake Advisory Board of the Forest Service in the Department of Agriculture.

Mr. Onthank received the Distinguished Service Award from the Oregon Parks and Recreation Society in February, the same month he was named a joint recipient, with his wife, of the Oregon Wildlife Federation Conservation Award.

More Redwoods Saved

Two announcements made this fall tell of new acreages of redwoods to be brought under protection.

A grant of $1 million from the Contingency Reserve of the Land and Water Conservation Fund to the State of California will be matched by the State with funds provided through the Save-the-Redwoods League. The monies will be applied to the continuing acquisition of a 1,620-acre addition for Humboldt Redwood State Park, about 100 miles south of the area originally proposed by the Administration for a Redwoods National Park. The 530 acres involved have not yet been appraised. The full addition will eventually extend the Avenue of the Giants by about seven miles and will help preserve 815 acres of virgin redwoods and over 800 acres of second growth redwoods and other timbered areas. Total

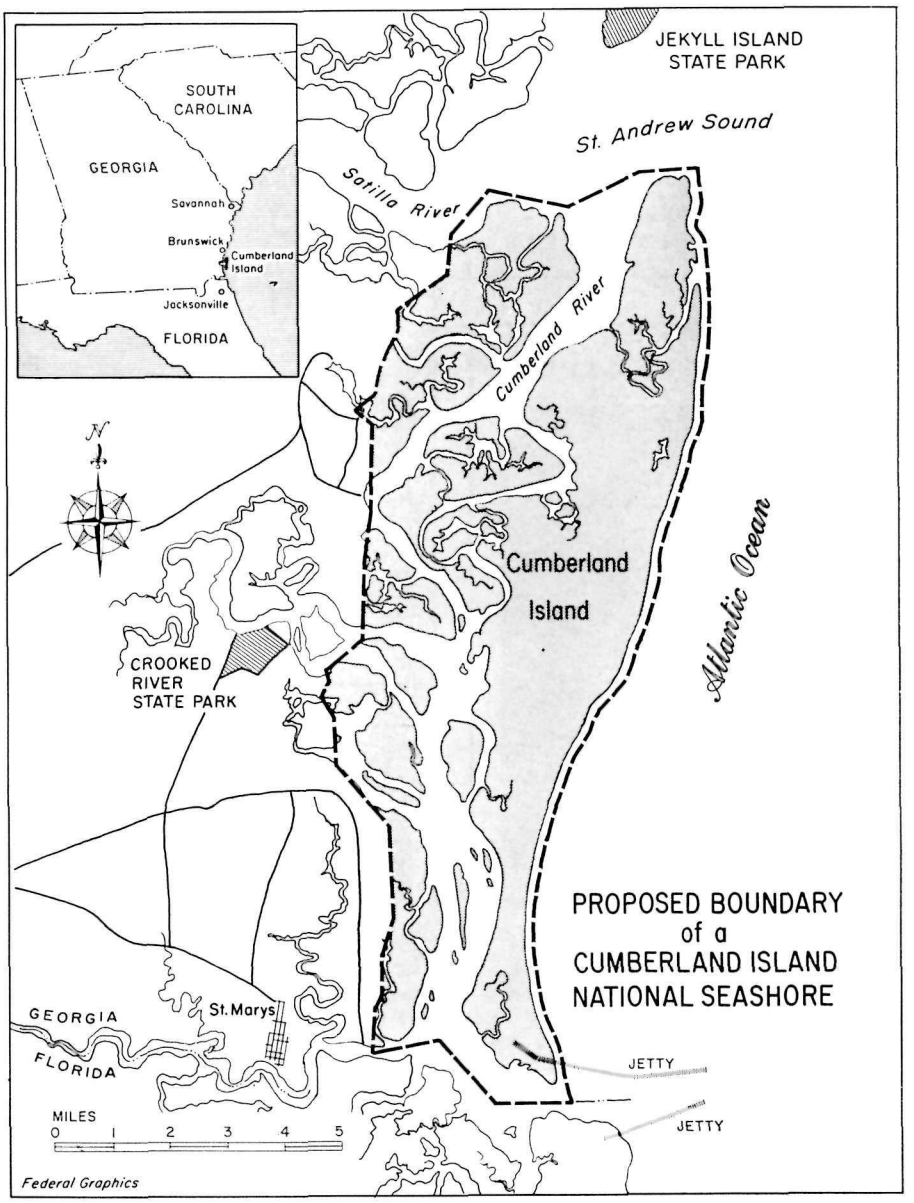
(*Continued on page 20*)

National Park Service Proposes a Cumberland Island National Seashore on Georgia Coast

Some 22 years ago the National Park Service studied and reported on the national seashore possibilities then remaining along the Eastern seaboard and the Gulf Coast. Many localities were listed and evaluated, and high priority was assigned to the acquisition of 16 of them; on that list of 16 were several areas which have since become national seashores, or which have in some instances been incorporated into larger new seashores.

In October of this year the Service released a handsome brochure suggesting seashore status for Cumberland Island, one of the picture-book Sea Islands just off the low-lying coast of southeast Georgia. While these sandy, palmetto-and-live-oak islands that form a limp chain along the coasts of South Carolina and Georgia have a somewhat different geological history than those which continue northward, with interruptions, as far as Massachusetts, they have a special semi-tropical, low-key charm of their own. As is true on all these islands of the semi-tropic southeast, vegetational changes are measured in minute changes of elevation; on Cumberland, the plant cover ranges from jungle-like forest to grassy marsh and active, moving dunes. Nearly a hundred species of birds are native or transient; the relatively restricted mammal population is distinguished by the presence of a unique species, the Cumberland Island pocket gopher.

The existing national seashores are predominantly sun-and-sand by nature; should the Service's Cumberland Island proposal bear fruit, a seashore of somewhat different nature would be added to the park system—sun, sand, and semi-tropical forest.



cost is estimated at about $7 million.

The Jedediah Smith Redwoods State Park has been enlarged by 17 acres, deeded to California by the Save-the-Redwoods League. This property is located along State Highway 199 and is bounded on two sides by the park.

Lakeshore Takes Form

Between the authorization of a national park system unit and its eventual dedication comes the laborious process of land acquisition. In filling out the newly authorized Indiana Dunes National Lakeshore, the Government has recently entered into an agreement with the Inland Steel Corporation under which it will immediately purchase a 90-acre parcel for the West Beach Unit of the projected lakeshore, with an 11-month option to purchase another 295 acres in the same area. Secretary of the Interior Stewart L. Udall has pointed out that acquisition of the Inland tract is critical to development of the lakeshore because it is the largest single tract, is closest to the population centers of Chicago and Gary, and has a superb beach for swimming. The Government will have the right of entry to the optioned 295 acres for survey, exploration, and preliminary design of public-use facilities.

Reviews

FAREWELL TO TEXAS: A Vanishing Wilderness. By William O. Douglas. McGraw-Hill Book Company, 330 W. 42nd St., New York City 10036. 1967. xi + 242 pages, illustrated. $6.95.

This book adds to the overwhelming evidence that Justice Douglas is indeed one of the giant figures in twentieth-century America. His life's activities, as reflected in his writings, demonstrate that the qualities that make for a great judge —wisdom, understanding and the ability to apply equitably the standards of law to human experience—come from the breadth and depth of one's own life. Justice Douglas' commitment to the outdoor life and his zealous pursuit of natural resource conservation have indeed served to provide him with the human perspective that is so essential to leadership in a democratic society.

It took Justice Douglas six years to complete the field work for this volume, whose title arises out of a melancholy feeling that Texas may be lost to conservation, nature trails, back-packing, climbing and outdoor recreation. But there is some hope. He looks to new schools, with their modern school facilities and teachers, as a way of raising the level of citizenship so that a new generation may well understand the need to save the areas of beauty and wilderness "with which God has blessed this nation."

This is a book of tall tales, apocryphal history, folk songs, Indian lore, archeology, botany, geology, history, and occasional recipes. It is also a book of legends—the legend of the dogwood as told in the Texas Big Thicket is moving. It is a book of occasional poetry, too;

particularly descriptions of the beauty of flowers, the orchestration of birds singing, and travels along the trails and rivers. A Mexican *vaquero* is quoted as describing the canyons of the Rio Grande thus: "You go south from Fort Davis and, after a while, you come to a place where the rainbows wait for the rain, and the big river is kept in a stone box, and water runs uphill and the mountains float in the air, except at night when they go away to play with other mountains. . . ."

It is a book also filled with indignation, particularly as the author describes the murder through vandalism of a 1000-year-old magnolia tree, and as he attacks the railroads for using such magnolias for railroad ties. And there is indignation as he describes the killing of birds and trees through spraying by the lumber companies. There is also pathos as the author describes the loss of the golden eagle through predators, the use of DDT, and the policy of the Department of Interior.

There are heroes and villains in this real-life story. The evildoers are the "modern Ahabs," quoting from the history of Naboth's vineyards as told in the Old Testament. "The dam builders are among the most destructive Ahabs that Texas knows." And there are also the lumber companies, the oil companies, the real estate developers, the road builders and the poachers.

"They see a tree and think in terms of board feet.

They see a cliff and think in terms of gravel.

They see a river and think in terms of dams, because dams mean profitable contracts.

They see a mountain and think in terms of minerals, roads, and excavations.

They think of parks in terms of private enterprise—moneymaking schemes—not nature trails, but amusement centers."

He reminds us also that not all of the Ahabs are in private industry. Some "wear Federal uniforms and sit in the seats of the mighty in Washington, D.C."

He mistrusts the National Park Service and fears that the Department of Interior corrupts national parks by "development." A park, in his view, should have its wilderness preserved by putting civilization on its perimeter rather than having it penetrate the sanctuary with roads, campgrounds, hotels, the paraphernalia of cities.

Justice Douglas is worried about Texas, which has hundreds of millions of dollars to spend for the promotion of right-wing activity, but very little for private activity to save pieces of our outdoor heritage. He fears that Texas has not yet entered the present century when it comes to preserving large areas of its wonderland for outdoor recreation.

There are heroes, too, in this book, and among them are the President and Mrs. Johnson, and Senator Yarborough. He refers to the President's 1965 State of the Union Message describing the Texas hill-country, and he quotes Mrs. Johnson: "While we continue to explore new frontiers in outer space, we must exert more effort in making the world in which we live a better and more attractive place to play, and to raise our families."

The Justice's great plea is that we appreciate the responsibility of man to the earth. He sees hopeful signs in the efforts of Senator Yarborough to make the Big Thicket a national park, and is pleased at the creation of Big Bend National Park, although he suspects that it came into being because the previous owners of its land, having "pounded and despoiled it" were now looking to be bailed out through Government acquisition. He is delighted at the recent creation of the Guadalupe Mountains National Park, and he urges putting Capote Falls into the public domain through Federal measures.

There is, finally, a philosophy to this book. Whoever, he says, may be the owners in law of our great natural shrines, these indeed "belong in a sense to everyone in the country. . . . Their beauty is the inheritance of all the people."

—*Max M. Kampelman*

ZERSTOERUNG DER NATUR: UNSER SCHICKSAL VON MORGEN? (Destruction of Nature: Our Fate of Tomorrow?) By Otto Kraus. Glock and Lutz, Nuremberg, Germany. 253 pages, illustrated, with index. $4.20 (in German).

This collection of 30 lectures and essays by Professor O. Kraus, noted European conservationist, records the author's 20-year-long uphill struggle in the battle against nature encroachment on the part of "vested interests" in post-war Germany. This book is disquieting, but stimulating. The epilogue, titled "Second Defense of Our Soil," is a strong plea for concerted action to protect and preserve a "perishing nature."

Professor Kraus is the Director of the Bavarian Office for Nature Conservation and advisor to the Bavarian Department of Interior on matters pertaining to conservation. He has participated in and has addressed numerous conservation congresses in Europe and the United States, and has been the recipient of highest honors, including the coveted van Tienhoven prize for conservation. Significantly, this long-time champion of nature conservation makes his home in the Bavarian Alps, whose renowned scenery is under continual threat of exploitation. Its remaining sanctuaries of unspoiled nature owe a large debt to the eloquent warnings and exhortations of Professor Kraus which, for the serious student of conservation, are now conveniently assembled under one cover.

—*William J. Owen*

AMPHIBIANS AND REPTILES OF GREAT SMOKY MOUNTAINS NATIONAL PARK. By James E. Huheey and Arthur Stupka. The University of Tennessee Press, Knoxville 16. ix + 98 pages, with index and appendices. Illustrated. $3.00.

A field guide in 5½" x 8½"-size, comfortable for large pockets, whose title indicates its mission. This volume is highly professional in organization, design and presswork, and continues the fine publications which have been presented from time to time by the University of Tennessee Press on Great Smokies Park natural history subjects.

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Photograph by O. F. Oldendorph

A small desert kit fox in Anza-Borrego Desert Park, lured near camera by bait, casts an outsized shadow in the light of a flash-bulb.

PICTURE-TAKING, we are told in the advertisements, is easy. Anyone can take pictures, and most of the pictures taken by "anyone" are perfectly adequate to their purpose, which is to please the picture-taker and his friends. Pictures like the one above are not so easy, and require a skillful hand and a great deal of patience and careful preparation. But for amateur or professional photographers alike, state parks like California's great Anza-Borrego Desert are a challenge to individual skills and tastes; beyond that, such public reservations are an important facet in the National Parks Association's concept of regional planning for the national parks. Such planning is designed to relieve the great parks of the pressures of overcrowding and the disfigurements of overuse; it is the only long-term answer to the perennial protection-and-use problem. You can assist the Association in this planning work by a contribution over and above regular dues; such contributions are deductible for Federal income tax purposes.

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