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A Footnote to Two Wars

BY FREDERICK L. RATH, JR.,
ASSISTANT HISTORICAL TECHNICIAN

Historians like to draw analogies between the past and the present, and to say, with a kind of triumphant sneer, "There is nothing new under the sun." The habit is a bad one; perhaps there should be a law against such self-conscious effort, particularly since the historian offers his contribution only after the event.

Nonetheless, an opportunity too good to be passed has been offered by the recent military operations in Europe. The American public has watched with great interest the successful German offensive against the reputedly impregnable Maginot Line and its prototypes. One phase of these operations, that against the advance pill boxes covering the greater fortifications, is not dissimilar to a plan evolved by Federal forces on the Savannah River in 1862. The tactics of the Germans, so far as has been gleaned from present accounts, involved a use of flame throwers, hand grenades, and other special implements of war. Exactly how the operations were made effective is not yet known. The Germans were successful, at any rate, either in forcing their way into the small forts or in having the defenders open the forts to them.

In October 1861, General T. W. Sherman and more than 12,000 Federal soldiers embarked from Norfolk, Virginia, for an undisclosed destination. The sealed orders under which the huge flotilla sailed were opened at sea, after a violent hurricane wrecked several ships. The expedition, it was then learned, was to rendezvous at Port Royal Sound, South Carolina. Early in November, Forts Walker and Beauregard, guarding the entrance to the Sound, were taken, and the Union forces set up their headquarters on Hilton Head Island, about 15 miles north of the mouth of the Savannah River where stood Fort Pulaski, garrisoned by some 400 Confederates. A natural objective was the seizure of this fort, which controlled ingress to and egress from the important cotton port of Savannah.

In order to invest the fort, it was necessary to cut it off from its source of supply, the city itself, so expeditions were sent out early in 1862 to occupy the islands surrounding Cockspur Island, the site of Fort Pulaski. North and west of this island, along the Savannah River, lay a series of marsh islands on which batteries of guns were to be erected. This task was entrusted to the Forty-Eighth Regiment, New York State Volunteers, and the Seventh Connecticut Volunteers.

Accordingly, in February 1862, batteries were set up on Jones and Bird Islands, which were separated by the North Channel, or shipping channel, of the Savannah River. The story of the placing of the guns, a laborious task involving the building of causeways across the marshes, can be told at another time. By February 20, Battery Vulcan and Battery Hamilton were in position to stop all traffic between Savannah and Fort Pulaski.

The story that follows comes from the pen of the Rev. D. C. Knowles, Captain,
Company D, Forty-Eighth New York, who describes graphically the plans of the "Cold-Chisel Brigade." 1

And now I come to an episode that is a type of many a curious plan that our civil war brought forth. Probably no contest ever produced so many novel expedients to circumvent an enemy as were born in the fertile brains of our inventive Yankee soldiers. Powder gun-boats, monitors, and mines hurling forts into the air are samples of these extra-military expedients for defeating a watchful foe. The event I am now about to relate is not a whit behind the chiefest of them in hazard and reckless audacity.

About the middle of March two deserters from the rebel lines came into our brigade and reported the existence of a steamer at Savannah clad with railroad iron, after the order of the celebrated Merrimac. They said a movement was on foot to run the vessel down with a body of troops, capture our forts on the banks of the Savannah, and thus open the way to the relief of Pulaski.

Certain reports of officers making reconnoissances of the river seemed to corroborate the existence of such a vessel, and the fears of our officers were aroused for our safety and the success of our enterprises. Schemes for defence were at once devised, and the plan I now give in detail was adopted.

It was supposed that the vessel lying low in the water, with sloping sides of iron like the roof of a house, would steam down the river and anchor directly between our batteries, of which we had two, one on either bank, and proceed boldly to shell us at close range, while all our shot in reply would fly harmlessly from her invulnerable covering. In the mean time the infantry would attack us in the rear, cut off retreat, and take us all prisoners at their convenience. The line of defence, therefore, must include the capture of the vessel by some expedient. The plan devised in the fertile brain of somebody was to take six common row-boats, three on either side of the river, man each of them with six oars-men, six soldiers, and an officer. The soldiers were to be armed with revolvers, hand-grenades, cold-chisels, and sledge-hammers. The boats were to be well supplied with grappling-irons and ropes. Thus equipped, when the vessel came, the whole expedition was to row out from either shore, board the vessel by means of ropes and grappling-irons, keep the gunners from the guns by the free use of hand-grenades thrown in the port-holes, and cutting through the iron roof by means of the cold-chisels and sledge-hammers, get inside the vessel and capture her, crew and all. Such, in brief, was the line of defence. Suffice it to say, the boats were selected, the material all sent down to the batteries, and the officer in command of the forts directed to select some one to lead the forlorn hope. I was called to the command. Selecting two lieutenants as assistants, we picked our crews, drilled our men, and awaited the final hour.

While making preparations, Captain Hamilton, a prominent officer in the Third Artillery of the regular army, came down to inspect our progress, and report our condition. He sent for me to visit him in the Lieutenant-Colonel's tent. I ex-

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plained our preparations, and asked advice. One point seemed to me not to have been well considered. I said to him, "Captain, that vessel has steam and an engine, and it seems to me if we should succeed in getting a force on her sloping sides, and threatening to take her, they would slip their cables, steam up the Savannah, and carry us off to jail with all dispatch." "But you must stop her," said he. "Well, how?" was my reply. He sat a moment in silent meditation, when he broke out: "I do not know any better way than to take strong ropes, fasten them to her anchor or some part of the vessel, and then attach the other end to the screw, so that when the wheel starts the rope will wind up and stop its revolutions." "Not a very easy thing to do it strikes me," said I, "in such a rapid current as this river, and that too while cannon are thundering in our very faces." "Well," said he, "it is a desperate case, and we must hold these batteries at any cost. You must do the best you can, at any rate."

Just at that moment a thought struck me, suggested by my knowledge of the construction of a steam-boiler and the presence of the cold-chisels. I ventured to suggest it as a new plan of offence. "Captain," said I, "why could we not board the vessel, strike at once for the smoke-stack, and cutting a hole in it, throw down a bomb-shell, blow up these tubes that run through the boiler, and thus let out the steam and scald the crew, and take the whole institution at a blow."

The Captain sprang to his feet, with a face all radiant with joy, and with many big words which I do not desire to repeat, declared that the thing should be done, and consequently a huge bomb-shell, with fuse all ready, was placed in each boat as a part of our armament. And while we waited the coming of our foe we wrote to our friends the possibility of our fate, and talked together of a grave in the muddy flood of the Savannah. For we all felt assured that nothing less than an interposition of Providence could save us from certain destruction. To row half a mile in the face of such a foe, in such a rapid current, in crowded boats, and board a vessel under such conditions, was an enterprise that had in it few chances of success. Disaster in all probability would have been the end of such an expedition. And yet in the face of these convictions we entered on the project with all the ardor of assured victory. The devoted band was denominated "The Cold-Chisel Brigade," and when the enterprise was finally abandoned the cold-chisels were seized as souvenirs of a project that gained at the time quite a local notoriety.

Suffice it to say the report was false. No such vessel then existed; and when General Hunter took command of the Department he made an early visit to the
batteries to see what the "Cold-Chisel Brigade" was proposing to do, and with the curt remark, "What fool got up that plan?" he ordered it disbanded.

A variation of this story offers a humorous sidelight. Major General Quincy A. Gillmore, in charge of the operations against Fort Pulaski, gave this version:

The 48th New York, which furnished the guard for the battery, had not a reputation for conspicuous sanctity, but it is doubtful whether one story told of them would not suffer in point by contact with hard facts.

There was an iron-clad in Savannah named the Atlanta, but commonly known as the "Ladies" gun-boat, from the fact that means for building it had been largely supplied by contributions of jewelry from the ladies of the city. Some time after our occupation of Jones Island, it was reported that the Atlanta was coming down to shell us out. The thoughts of the battery-guard naturally turned toward measures for meeting such an attack, and it was resolved to fire shot connected by chains and so tangle her up and haul her ashore. When the question arose how they would get into their iron-bound prize, the officer in command of the detachment was ready with his solution: "I've got the men to do it." Then he paraded his men, and informed them of the facts. "Now, said he, "you've been in this cursed swamp for two weeks, up to your ears in mud, - no fun, no glory, and blessed poor pay. Here's a chancd. Let every one of you who has had any experience as a cracksman or a safe-blower step to the front." It is said that the whole detachment stepped off its two paces with perfect unanimity.²


Fort Pulaski is a physical monument which commemorates the end of a distinct chapter in the ever-changing development of military science. Its massive walls, in which approximately 25,000,000 bricks were placed by patient masons over a period of nearly 20 years, still bear today the historic scars of a 30-hour bombardment by federal artillerymen on April 10-11, 1862, a bombardment which demonstrated to the world for the first time the tremendous battering power of the new rifled cannon. Those walls, from 7 to 11 feet thick, crumbled away before the savage blows delivered by cone-nosed projectiles which spun and whirled through the air over a low, mile-long arc. Surrender of the "impregnable" fortress by the Confederates who had seized it at the outbreak of the War Between the States gave notice to military engineers that the day of brick citadels had passed forever.

Cockspur Island, called "the key to our province" by colonial writers of Georgia because of the strategic location at the mouth of the Savannah River, was selected in the early 1820's as the site of the present fort. Construction began in 1829 and went on fairly continuously until 1847, but the fortress was never completed with respect to its armament, only 20 of 146 contemplated guns having been mounted. It became a military prison in 1865 and three Confederate cabinet members were confined there. Abandoned as an active post in 1885, it fell into oblivion except for a short period during the Spanish-American War. Finally, the site was proclaimed a national monument in 1924, and since 1933 a program of renovation and preservation has made the historic structure accessible to visitors.
DIGGING UP PREHISTORY

An Archeological Survey of the Natchez Trace

BY J. D. JENNINGS,
ASSOCIATE ARCHEOLOGIST

Archeology as a word, and as an activity, has a definite meaning to every one. It calls up a vision of exciting adventures in desert wastes, or tangled jungle growths, adventures which but only prelude the triumphal thrill of discovering a huge ruined city, littered with golden debris and dotted with tombs containing fantastic baubles. Many people have also become aware of the equally informative, if less glittering, "dirt" archeology now going on in eastern North America. Possibly because romance usually lies across international boundaries, the sweaty diggers in the United States are rarely glamorous figures, nor do their mild adventures rate Sunday supplement space. Plodding along without benefit of such stimulus, the archeologists of the South are steadily building up a composite picture of the pre-European Indian populations of America.

As is true in all scientific endeavor, many men labor here toward a common aim. The ultimate story is the sum of their contributions. In the past decade governmental agencies, cooperating with other public institutions, have conducted in the South some of the world's most extensive excavations. Major W. S. Webb's TVA-PWA explorations in the valley of the Tennessee; J. A. Ford's Louisiana State University-WPA work in Louisiana; A. R. Kelly's Smithsonian-WPA activities in Macon, Georgia; D. L. DeJarnette's...
Geological Survey in Alabama in cooperation with Major Webb; Robert Wauchope's University of Georgia-WPA reconnaissance in North Georgia; Major Webb's University of Kentucky-WPA work in Kentucky; T. M. N. Lewis' University of Tennessee-TVA-WPA work, first in association with Major Webb, and later alone, in East and West Tennessee — these comprise a list of the major continuing archeological undertakings financed largely by the relief organizations. Besides these, many other valuable projects, although of shorter duration, were financed in North Carolina, Tennessee, Florida, Georgia, and other states. There is little wonder, therefore, that much information is now available, although even yet so little is the Southeast known that after nearly every excavation small segments of the entire prehistoric mosaic shift and rearrange their relation to the whole pattern.

Interestingly enough, little of the interest shown by students is localized in the State of Mississippi. More than 300 miles of the Natchez Trace lie in Mississippi in the northeast-southwest line shown on the accompanying map. Almost unknown archeologically is the area it cuts across. At its southern terminus, J. A. Ford and Moreau B. Chambers have done good work, but for the major length almost nothing is published. Realization of the near lack of information, although rich unstudied remains were known to exist, prompted the initiation in 1939 of a Natchez Trace National Parkway archeological survey which would be concerned not only with Mississippi but also with the entire length of the Trace.

While the purposes and needs guiding the operation of the Trace survey are implicit in the foregoing paragraphs, and there is the ultimate aim of contributing a few paragraphs to the final outline of pre-European Indian history, the immediate aims are definite and urgent. Five major objectives have been outlined, although the first three listed are of the more urgent nature.

First, comes the search for sites for purposes of parkway location and for compilation of the base historic sheet. This first activity is, in addition, an important archeological technique, inasmuch as a rapid surface reconnaissance permits the collection of surface material, where this exists, and gives a partial preview of the cultural horizons represented by the content of the sites visited.

Second, upon the completion of the preliminary analysis of survey collections and other data, sites of potential scientific value or of outstanding intrinsic display appeal, are recommended for preservation either through acquisition as parkway right-of-way or by other public agencies. Action has not yet been taken on the recommendations submitted.

Third, aside from the sites eventually acquired, many other sites discovered by the survey will lie too far from the motor road for acquisition, or may not be spectacular, even though there is evidence from surface material that several cultures, or a new variant of one already recognized, once existed on the site. In order to verify the suggestions derived from surface material or to check on the scientific value implied, it is necessary to conduct digging operations in varying degrees of intensity.


2. Analysis of Indian Village Site Collections from Louisiana and Mississippi, Anthropological Study No. 2, Department of Conservation, Louisiana Geological Survey.

3. Associated with Mississippi State Department of Archives and History.
The excavation program is primarily for the purpose of filling out the blanks in the archeological framework through the addition of new scientific data.

Fourth, if excavations are conducted on federally-owned Natchez Trace Parkway lands, any features of interest, such as a well-preserved burial, a firepit, a house-pattern, or other object which can be preserved or restored, should be dug carefully so as to preserve it entirely and protect it until a field display can be made available to users of the Trace.

Fifth, the last point is allied closely to the preceding in that the survey is in the larger view collecting data for use in the informational program of the parkway. It is further hoped that contributions to the general knowledge can thus be made.

Already referred to is Mr. Gardner's lucid account of the Natchez Trace and its early history. The account tells how the Trace came into being: as a prehistoric highway, no less. Its purpose was to link tribal centers for commercial and social reasons. In Mississippi alone three such tribes, similar in language, but with differing habits of living, were connected by the trail.

In the South, the autocratic Natchez, famous for their bloody funeral sacrifices, their rigid caste system, their austere sun-worshipping religion, and their stubborn resistance to French insolence, enjoyed the respect and fear of their red neighbors. East and north of the Natchez tribe lived the Choctaw, related in language but with a less noteworthy set of religious and ceremonial practices. Burial rites, though involving less bloodshed, were still not calculated to soothe a queasy stomach. The corpse was stored upon a rack or scaffold until the passage of time had removed most of the flesh from the bones. Next a pair of specially designated operatives, with long fingernails for the purpose, cleaned the vestiges of flesh from the bones, and placed them, with appropriate ceremony, in a charnel house where other baskets of bones lay. When an adequate number had accumulated, all were stacked in a selected spot, and were covered with a low mound of earth.

In other respects we are told that the Choctaw were not much given to ceremony. Very industrious, these Indians were the best farmers of the Southeast, growing corn and other products in excess of their needs, and diverting their surplus into trade. The Choctaw were good warriors although not given to aggression; they defended their homeland but did not seek to expand their territory by conquest. But in northwest Mississippi the gallant Chickasaw, a small hardy tribe of excellent warriors, were respected as fighters by red and white alike. Although farmers, they also ranged as far north as the Duck River in Tennessee on hunting and war expeditions. They also kept up an intermittent feud with the French and Choctaw to the south; the tribe was always friendly to both British and American overtures. Several interesting ceremonies were practiced but burial was accomplished quietly by placing the deceased with fitting solemnities, in a shallow pit beneath his bed.

From the Chickasaw country the Trace led over the Tennessee River (in what is now Alabama) and on along the ridges of central Tennessee to and beyond what is now Nashville. Part of this territory was claimed as a hunting preserve by the far-ranging Chickasaw and part by the Cherokee of North Carolina and East Tennessee, but no extensive long-lived settlements are reported.

So much for the recent Indian occupation, recorded by early explorers, mission-
aries, traders, and government officials. Before the Europeans saw the country, however, a long series of Indian civilizations had appeared, flowered and been displaced by more vigorous newcomers. What many of these early cultures were like is already partly known. The Natchez, for example, were preceded by four well-defined cultures which have been discovered and described by Ford and his associates. A related series, but by no means identical, has been less completely observed beneath the Choctaw remains. Before the Chickasaw came to the place where they were discovered by the whites, one or more vaguely outlined periods had already run their course, while in the Tennessee Valley a long series of occupations go back 1,000 or more years to a time when the red men did not even possess knowledge of pottery making or agriculture, but lived on such animals, shell fish, and wild vegetable foods as they could collect. No evidence as to their language or many of their customs has come down to the present day. Nor is it certain just what relation these earlier tribes were to the last ones in the region. In some cases the ages of the various periods and the interrelation of the tribes (those on the Tennessee River to those on the Mississippi River in Louisiana, for example) are not yet known.

The scientific problems therefore, are to gather data along portions of the Trace where least exploration has been done, to search for relationships between the archeologically discovered old cultures and the historically described recent tribes, and to continue to search for light on the relationship to each other of the old, incompletely known civilizations and for data about their actual ages.

Because the Natchez Trace cuts across tribal boundary lines, the range of archeological interest is necessarily greatly widened. In order to tell the complete story, it will be obligatory to borrow data from many sources and attempt to synthesize it with any original findings reported by the survey.

Since the scope of the effort is so ramified, a random controlled sampling of the sites along the roadway is being practiced rather than an immediate attempt to locate each site in the vicinity of 450 miles of parkway. This is done so that an early delineation of scientific problems may be made, and the direction where answers might be expected can be indicated. The map shows the path of the Trace and the areas sampled by the survey thus far. A report of the survey activities has been prepared and is now ready for a limited National Park Service distribution. This report shows that additional research on the problems mentioned two paragraphs above will take certain directions. It also demonstrates that a beginning was made toward determining the predecessors of the Chickasaw.

Enough data have been recovered to warrant initiation of an excavation program. This began only recently on a Chickasaw site just south of Tupelo, Mississippi. Already the finds are expanding our knowledge of this enigmatic tribe. While the party is operating in this region, some of the very old sites will be sampled also. With the birds, the excavation party will go south, and after January 1, 1941, operations will be in the vicinity of Natchez, Mississippi, where the Natchez Indian villages and older sites will be examined. Periodic notes on progress of the excavation will be forwarded to The Regional Review during the coming months.

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4Archeological Survey Natchez Trace, September 3, 1940.
THE SIGNIFICANCE OF GUILFORD COURTHOUSE

Interpretative Statement: II

Note: This is the second in a series of interpretative statements prepared by the Branch of Historic Sites to explain the broader relationships to America’s national record of those areas which have been set aside for permanent preservation because of their historical importance. The brief statement below concerns Guilford Courthouse National Military Park, near Greensboro, North Carolina, which was established March 2, 1917, as the fifth area of that park classification.

Guilford Courthouse National Military Park includes the site of the original Guilford County, North Carolina, courthouse, and a part of the vanished village of Martinsville which grew up around the courthouse and jail. More important, however, it is the site over which was contended the Battle of Guilford Courthouse on March 15, 1781.

The Battle of Guilford Courthouse in one sense marks the beginning of the end of the Revolutionary struggle. After his victory in that battle, Earl Cornwallis was so weakened as to be unable to carry to a successful conclusion the British plan of campaign formed more than two years earlier. The plan had contemplated the conquest of Georgia, the Carolinas, Virginia, and possibly Maryland, and the detachment of these colonies from what was believed to be the more vigorously Revolutionary East and North. It was assumed by the British high command that the southern colonies could be restored to the crown and that, with their detachment, those remaining could be defeated more easily.

The plan had succeeded sufficiently to place in British power the States of Georgia and South Carolina; one American Army under Lincoln had surrendered at Charleston, and another under Gates had been defeated disastrously at Camden during the spring and summer of 1780. Cornwallis had invaded North Carolina in the early fall of 1780, but as a result of the unexpected blow at Kings Mountain, was forced to return to South Carolina.

The winter campaign of 1781 culminating in the Battle of Guilford Courthouse began a few weeks after the arrival of Greene in the southern department as successor to Gates. Greene, after his subordinate Morgan had inflicted a defeat on Tarleton at Cowpens, conducted a masterly retreat completely across North Carolina into Virginia. He returned soon, however, and in the middle of March took position at Guilford Courthouse to offer the encounter that his adversary had so ardently desired.

The battle involved approximately 2,000 British troops and about 4,400 Americans. It lasted about two and a half hours, and was exceedingly bloody. The British losses were very nearly 600 in killed or wounded, while the Americans lost approximately half as many. The latter had a large number missing at the close of the engagement, but the majority of these returned in a few days.
After winning his victory, Cornwallis was unable to proceed. He had started northward from his winter quarters at Winnsborough, South Carolina, early in January. He had pushed his pursuit of the retreating Americans as rapidly as possible, resorting to the expedient of burning his wagon train in order that that unit might not delay his advance. By the middle of March his army was exhausted, food was scarce, supplies of all kinds were dangerously low, or completely expended, and in the Battle of Guilford Courthouse he had lost more than a quarter of his entire force. Rest, reorganization, and refitting were imperatively demanded if his force was to preserve itself.

The myriad supplies of all kinds which were needed could be obtained only from Charleston. After Guilford Courthouse, Cornwallis, therefore, proceeded to Wilmington where water communication with his Charleston base was available. His army was so exhausted that it had much trouble in reaching the coast, and was in no wise a danger to North Carolina.

Guilford Courthouse so weakened Cornwallis that he was unable to extend to North Carolina the British reconquest in the South and was forced to turn his attention to extricating his army from its own difficult situation. The American forces under Greene, therefore, were in a position to disregard the remnant of the force with which they had contended at Guilford and to move into South Carolina.

Guilford Courthouse, then, marks the failure of the British plan of campaign as it rendered impossible the conquest and occupation by the royal forces of North Carolina, and thus prevented the detachment of the South from the remainder of the revolting colonies; and it freed Greene from worry as to North Carolina, permitting him to turn his attention to the redemption of South Carolina.
The tattered 35-star flag shown above, measuring 31½ by 26½ inches, was presented recently to Gettysburg National Military Park by John W. England, former New York City sergeant of police, who had received it from his father, the late Police Captain John W. England, last surviving member of Hancock Post No. 259, Grand Army of the Republic. The flag floated over the headquarters of Major General Winfield Scott Hancock whose II Corps held Seminary Ridge, the focal point of Pickett's famous charge on the third day of the history-making battle of Gettysburg, July 1-3, 1863.
TYPES OF STATE PARK AGENCIES

LEGEND

- Conservation Department and or Commission
- Park Board or Commission
- Park or Recreation and Forest Commission
- Forestry Department and or Commission
- Fish and Game Commission
- Department of Public Works and Buildings
- Historical Society
- Highway Department
- Divided Authority
- None
THE REGIONAL REVIEW

AMERICA'S STATE PARK AGENCIES

None Is Perfect, All Have Virtues

BY R. M. SCHENCK,
INSPECTOR.

To select, acquire, preserve and maintain areas of natural features, scenic beauty, recreational utility and historical and scientific interest, for the health, education, and pleasure of the people -- these and similar objectives have led to the creation of state park departments and the growth of state park systems. The growth has been continuous because park and recreational areas are recognized as indispensable to modern civilization.

Thirty-six of the present primary organizations administering the various state park systems have been established since 1920, and 22 of that total have assumed their present form since 1930. The beginning of the movement, however, goes back to 1865, after Congress had granted to California the Yosemite Valley and the Mariposa Grove of Big Trees for state park purposes. In the 1860's, New York, Michigan, Minnesota and Connecticut established their first state parks. Other states, notably Massachusetts, made important contributions to early legislation.

There was little coordination between states during the establishment of the earlier state parks. For this, and perhaps certain other reasons, their administrative structures differ widely. At present there is considerable variety both in the types of administrative authority charged with the responsibility for parks and in the designations of such departments. This is illustrated by the accompanying map with explanatory notes showing the various types of organizations that have been developed. The most characteristic type of unified administration in the eastern section of the country is the conservation department or commission; west of the Mississippi the park board or commission is predominant. A forest department or commission is the primary agency for the administration of state parks in eight states, while a department charged with dual responsibility for parks and other aspects of conservation, such as forestry or game and fish, has jurisdiction in four states. Other types of administrative authority are the historical societies in North Dakota and Ohio, the highway department in Oregon, the Departments of Public Works in Illinois and Idaho, and the land commissioners in Montana. In some states there is no recognized primary administrative authority, a condition which may be illustrated by Ohio where the administration of lands used for park purposes is divided among two or more agencies. Arizona is the only state which has passed no general legislation in the interest of state parks.

In view of the wide variety of park administrative organizations and because, too, the successful administrative system depends for its success as much on the type of men who compose it as on the mechanics of organization, it is difficult to be specific as to the best type of administrative system. As a matter of fact, there is no best administrative set-up for state park systems. Certain advantages and disadvantages may be observed in all of them.

For those states having no existing park organization, an independent board or commission of five or six members, appointed by the Governor and having staggered
terms, may furnish the test machinery for supervising parks and recreational matters. For states where park work already has been properly recognized, a conservation department or commission may be nearest the ideal. A conservation department, park board, or commission, headed by a nonpartisan board with staggered terms, may coordinate most effectively the work of park and related agencies. The functions of such a board should be (a) to establish policies, (b) to determine budgetary requirements and major fiscal policies, and (c) to select the executive head of the department, but not to participate in administrative matters.

Probably it will not be possible to attain in the near future any great similarity between state administrative organizations, and this is perhaps not necessary; nevertheless, it is certain that there are now too few good state systems of organization. In general, each state should have its park and recreation administration sufficiently well organized to take the lead whenever possible in assisting the county, metropolitan, and other park districts in recreational matters.

While there is considerable variation in the scope of authority granted to park administrators, commissions, or boards, certain powers are found to be common to most. They usually are authorized

(a) to acquire lands by gift, purchase (including condemnation), or otherwise for state park and recreational purposes and to develop such properties for the purpose for which they are established,

(b) to reject lands, whether donated, devised or bequeathed, for inclusion in the state's park system,

(c) to establish lands already in state ownership as parks or recreational preserves,

(d) to construct necessary roads, structures, and other facilities in the parks,

(e) to employ technical and administrative assistance as may be required properly to operate, plan, study, or survey the state's recreational facilities or the need therefor,

(f) to expend such funds as may be available for personnel and other necessary expense of operation,

(g) to make and enforce regulations relating to the care, protection, and use of areas,

(h) to impose such fees as may be considered reasonable and proper for the use of facilities and

(i) to contract with private persons for operation of services.

There can be no doubt that the features (a) to (g) inclusive are necessary and desirable for the proper administration of parks. It may be well, however, to obtain authority by basic legislation for imposing fees for use of facilities because there are strong arguments against any such charges. Some insist that a charge should be
made as much for the psychological effect of inducing appreciation on the part of visitors as for aiding in furnishing funds for maintenance. In any case, the question of fees is for the several states to determine. Where the federal government participates in construction the chief interest of the National Park Service, so far as state fiscal affairs are concerned, is to see that funds are forthcoming from some source to provide for operation and maintenance of facilities constructed in state parks with federal funds.

In like manner, the problem of concessions is for the states to solve. Some believe that the licensing of conditional concessions is the practical method of meeting the special accommodation problem if authority be reserved to the state to regulate both accommodations and prices. It has been the general experience in both the federal and state park areas that exclusive concessions with government control of prices is preferable to competition as a means of assuring that services will be provided to the public at reasonable prices. State operation of services has been undertaken in a few states.

Most state-administered properties established primarily for recreation are called state parks. The term may be said to have a slightly different meaning in various states. Certain states have established definite and high standards for their parks while others include park properties which are almost wholly local in appeal. It is therefore important that the park administrator classify his recreational holdings and administer them in accordance with their value and use. It may be well to include here a brief statement regarding the history and classification of holdings.

It has been nearly 75 years since the first state park was established in California. Later this park was turned over to the federal government and is now our world-famous Yosemite National Park. One of our greatest natural wonders, Niagara Falls, inspired state officials in 1885 to dedicate the Niagara State Reservation as New York's first state park. During that same year Mackinac Island and Fort Michilimackinac, originally military reservations, were transferred to the state of Michigan by the federal government for park purposes. Itasca State Park, Minnesota, containing beautiful lakes and valuable forests, was created in 1891. The Israel Putnam Memorial Camp Grounds, Connecticut, of historical interest, was established in 1887. The first state park areas, therefore, contained superlative scenery or were of historical interest.

As the states recognized their responsibility for providing for recreational needs many more areas were acquired and it was difficult to formulate a definition of a state park. There was once a popular belief that there should be "a state park every 100 miles." During the last 20 years many areas have been acquired primarily to satisfy the need for healthful and educational recreation. Some parks therefore were established which appeared to be of questionable quality. Yet, to criticize states which recognized the need of facilities for recreation as a legitimate function of state government with no one measuring rod for selecting, acquiring, and preserving state areas, would be folly. Those states which pioneered in the state park movement deserve the utmost credit. As automobiles became numerous and sufficient good roads were built to permit ready access to areas some distance from centers of population, the need for more areas and adequate recreational facilities became more apparent. Acquisition of large holdings was not always practicable or possible. Lack of funds, availability of suitable areas, cost of land, public support, the need for recreation-
al areas near centers of population not otherwise provided, and other factors frequently dictated the policy of selecting park areas.

As a means of assuring good administrative practice with respect to each classification or type, and in order that the using public may have a reasonably definite concept of the character of the various types, it would appear desirable for the several agencies entrusted with administration of recreational areas to give serious consideration to a common classification based on a standardized terminology. Proper classification would aid materially in planning and development of policy, obtaining funds for development, encouraging local and federal participation or assistance, and simplifying the directing of interstate travel.

The actual form that the organization for administration may take depends upon the degree of centralization desired and upon whether the park system is new or firmly established within the state. The number of persons needed in the organization depends on the size of the system, its previous ability to obtain results, public support, available information, and the amount of assistance obtainable from other departments or agencies. A well-established state park organization perhaps will include:

1. A park administrator or executive.

2. A division of planning which would function frequently in advance of land purchase to determine need and priority of areas and facilities to be developed, to prepare necessary landscape, architectural, and engineering plans, and to assist in the problems of maintenance.

3. A division of recreation, headed by a recreational supervisor, to advise and plan for the recreational use of all areas of the system.

4. A division of operations performing the functions of budgeting, accounting, and procurement.

5. A public relations division to acquaint the public with the services available, and to train personnel.

Regardless of the number of persons employed or of how their functions are combined, those functions may be expected to be present and, while they are of unequal importance, the neglect of any of them will have a profound effect on the service rendered to the public. Too often the function omitted is that of the recreational planner. He can be all-important in promoting the wisest use of areas by utilization
of the most effective educational methods, by creating enthusiasm in communities, and by enlisting volunteer leadership which may assure public support.

Notwithstanding the importance of the central administrative agency, the success of a state park and recreational organization will depend on the success of its individual areas. In those areas the greatest stress must be placed on the selection and training of personnel, for the park superintendent or manager is the key to success. The park that he administers is a recreational resource, and how successfully this resource fulfills its function will depend on his ability to understand and interpret intelligently its latent possibilities to the people. The successful superintendent will capitalize on opportunities to carry out the broad program of his park and at the same time to enlist that public support which is needed for a public function.

Increasing appreciation of scientific planning is one of the most encouraging trends of our time. Initiation, planning, design, and construction invariably should originate with and be carried on under the direction of a competent division of planning or a planning consultant. The technician has a scientific reason for what he designs, builds, or wants done, and if he is a good technician his reason is usually a sound one compatible with the purpose and proper use of the area. The park administrator has the job of correlating these ideas and efforts into a workable general scheme. That must be done with a sympathetic understanding of the problems and the public needs. It is easy, of course, to be led far afield in planning; and there also is danger in considering minor technical problems too seriously, just as there is danger in yielding too rapidly to the constant demands of the general public. Good "horse sense" is still necessary for planning and administration even in these horseless buggy days. When considering just how much and what type of use the individual area will permit and the number of facilities to be provided for, it is well to recall the statement made by Harold S. Wagner, president of the National Conference on State Parks:

The fact is that any given park areas has a given capacity for people before a stone is turned. Upon completion of development, too, each area has a limited ability to provide for human use.

Structures and facilities must be sturdy and fool-proof if maintenance costs are to be kept within reason. Visitors are inclined to trample, disfigure, and destroy things which are ugly and inadequate. Well designed structures and good materials adapted to their use should (Continued on page 24)
WHAT WE DEFEND

Mr. Daniels, the versatile explorer who discovered both the South and New England, expresses admirably in the adjacent column what many writers and orators have attempted to say with more and longer words.

Man has but three things to defend: his life, his principles, and the land. But it is the last of these which, in a certain basic sense, is the most important, because it sustains the other two. It defines them, shapes them, nurtures them, and must be ever inseparable from them.

Thus strikingly is reemphasized the intangible but vastly significant values which are implicit in our national parks, monuments, historic sites, and patriotic shrines. Thus are the Statue of Liberty, Gettysburg, the Grand Canyon, and all the other superlative natural and historical parcels of our soil reaffirmed in their roles as American patriots. They stand as surely in the lines of defense as do the people of America. They share with their human fellow citizens the mutual obligations of national solidarity for national protection. Just as we defend them, so do they defend us; they uphold our arm, strengthen our purpose, and rally our morale.

As Director Drury has pointed out, some portions of our national areas also may serve active military purposes when that use is not inconsistent with the prime objectives of inclusive conservation. If there be inconsistency, however, then it would be folly to permit the act of defense to impair those very values which we seek to defend.

OUR STRENGTH IS IN OUR LAND

In a small voice which I wish were much louder I would like to say that while we move, and properly, to be ready to defend this land, we are already forgetting the land we defend. I mean the land --- the actual earth out of which our food grows and our forests, which is at least as much America as the people on it. I know we do not mean merely to defend a geographical area, but I lack the faith that freedom for many of us could flourish in a desert. It does not flourish now in those parts of America where the land is too worn for men to farm it in security. War would mean a new wasting --- an imperative, maybe patriotic wasting, a wasting nevertheless... It is time people began to realize that conservation is a part of preparedness... With famine rising again --- with the possibility that food may win another war --- it is a cockeyed country which does not consider, even in war terms, land use in the future in the light of land use in the past...

Once war is here we cannot stop to count the consequences of cutting down the pine trees --- to weep for the washing of our hills into the rivers. But we can recognize in any intelligent program of preparedness that our strength is still in our earth. Time may not suffice for the development of any plan for the wisest use of our land even for our defense of our land. But already we are building battleships which will not be ready for years. So we admit the possibility of some future for ourselves as well as for America. No program for its protection --- no program for power --- will be effective which neglects the land itself. Jonathan Daniels, Editor of the Raleigh (North Carolina) News and Observer, and author of recent books on the South and New England.
No Dread in England

Bristol March 29, 1804

Dear Sir,

I wrote to you 11 Feb'y by the Post ad\nvising you of the Receipt of the Bill on
Donaldson which is paid, since which I
have not had the Pleasure of hearing from
you, The so long threatened Invasion of this
Country has not yet been attempted but we
expect that in a few days it will be and
there seems to be no dread here about it the
whole Nation seems confident of being able
to defeat the Attack whenever it is made;
it is a very fortunate Circumstance that our
good old King is so much recovered as to be
able to attend to Business & it is expected that
in a few days his Health will be entirely
established. I have no further News to acquaint
you with & desiring to be remembered to all
Friends I am Dear Sir

Yours sincerely,
Geo. Braikenridge

The Regional Review moves slightly afield from its accustomed editorial course in
reproducing the 136-year-old letter shown above. Written in Bristol, England by
George Braikenridge to his father-in-law, Francis Jerdone, a merchant of Richmond,
Virginia, who is said to have established America's first chain store system, the
brief message affords a striking historical parallel between 1804 and 1940. In 1804
it was Napoleon who poised his forces for a descent on England, a threat never trans­
lated into reality. "... there seems to be no dread here about it," wrote Braiken­
ridge, "the whole Nation seems confident ..." The original of the letter was made
available to The Review by courtesy of Malcolm C. Graham, Accountant-in-Charge, United
States Treasury State Accounts Office, Richmond.
### THREE-YEAR TRAVEL RECORDS FOR REPORTING SERVICE AREAS OF REGION ONE

<table>
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<tr>
<th>National Parks</th>
<th>1938</th>
<th>1939</th>
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</thead>
<tbody>
<tr>
<td>Acadia, Maine</td>
<td>394,319</td>
<td>396,468</td>
<td>382,084</td>
</tr>
<tr>
<td>Great Smoky Mountains, North Carolina-Tennessee</td>
<td>694,634</td>
<td>761,567</td>
<td>860,900</td>
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<tr>
<td>Mammoth Cave, Kentucky</td>
<td>120,692</td>
<td>116,516</td>
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<tr>
<td>Shenandoah, Virginia</td>
<td>954,967</td>
<td>911,612</td>
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<tr>
<td>Ft. Jefferson, Florida</td>
<td>1,130</td>
<td>1,500</td>
<td>1,141</td>
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<tr>
<td>Ft. Marion, Florida</td>
<td>280,165</td>
<td>228,187</td>
<td>235,277</td>
</tr>
<tr>
<td>Ft. Matanzas, Florida</td>
<td>20,726</td>
<td>21,370</td>
<td>19,204</td>
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<tr>
<td>Ft. McHenry, Maryland</td>
<td>283,822</td>
<td>258,403</td>
<td>515,823</td>
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<tr>
<td>Ft. Pulaski, Georgia</td>
<td>45,170</td>
<td>40,995</td>
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<tr>
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<th>1938</th>
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<tbody>
<tr>
<td>Abraham Lincoln, Kentucky</td>
<td>121,144</td>
<td>112,626</td>
<td>136,945</td>
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<tr>
<td>Chalmette, Louisiana</td>
<td>15,592</td>
<td>24,948</td>
<td>37,921</td>
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<tr>
<td>Colonial, Virginia</td>
<td>590,903</td>
<td>408,980</td>
<td>523,440</td>
</tr>
<tr>
<td>Morristown, New Jersey</td>
<td>137,157</td>
<td>136,640</td>
<td>213,856</td>
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<tr>
<th>National Historic Sites</th>
<th>1938</th>
<th>1939</th>
<th>1940</th>
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</thead>
<tbody>
<tr>
<td>Hopewell Village, Pennsylvania</td>
<td>*</td>
<td>*</td>
<td>2,364</td>
</tr>
<tr>
<td>Manassas Battlefield, Virginia</td>
<td>*</td>
<td>*</td>
<td>5,340</td>
</tr>
<tr>
<td>Salem Maritime, Massachussets</td>
<td>*</td>
<td>1,000</td>
<td>4,584</td>
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<th>1938</th>
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<th>1940</th>
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<tbody>
<tr>
<td>Chickamauga and Chattanooga, Georgia-Tennessee</td>
<td>310,940</td>
<td>357,451</td>
<td>481,391</td>
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<tr>
<td>Fort Donelson, Tennessee</td>
<td>25,780</td>
<td>39,638</td>
<td>41,456</td>
</tr>
<tr>
<td>Fredericksburg and Spotsylvania, Virginia</td>
<td>96,732</td>
<td>162,475</td>
<td>93,664</td>
</tr>
<tr>
<td>Gettysburg, Pennsylvania</td>
<td>1,554,234</td>
<td>608,123</td>
<td>629,832</td>
</tr>
<tr>
<td>Guilford Courthouse, North Carolina</td>
<td>33,920</td>
<td>45,544</td>
<td>49,136</td>
</tr>
<tr>
<td>Kings Mountain, South Carolina</td>
<td>22,259</td>
<td>29,487</td>
<td>22,398</td>
</tr>
<tr>
<td>7. Moore's Creek, North Carolina</td>
<td>6,218</td>
<td>5,185</td>
<td>3,722</td>
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<tr>
<td>Petersburg, Virginia</td>
<td>150,486</td>
<td>192,246</td>
<td>183,191</td>
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<tr>
<td>Shiloh, Tennessee</td>
<td>346,069</td>
<td>327,504</td>
<td>203,987</td>
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<tr>
<td>Stones River, Tennessee</td>
<td>4,387</td>
<td>5,104</td>
<td>1,389</td>
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<tr>
<td>Vicksburg, Mississippi</td>
<td>317,120</td>
<td>290,227</td>
<td>193,600</td>
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<tr>
<th>National Battlefield Sites</th>
<th>1938</th>
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<th>1940</th>
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<tbody>
<tr>
<td>Antietam, Maryland</td>
<td>30,927</td>
<td>42,601</td>
<td>20,496</td>
</tr>
<tr>
<td>Brices Cross Roads, Mississippi</td>
<td>2,700</td>
<td>500</td>
<td>3,200</td>
</tr>
<tr>
<td>Fort Necessity, Pennsylvania</td>
<td>107,533</td>
<td>73,699</td>
<td>71,457</td>
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<tr>
<td>Kennesaw Mountain, Georgia</td>
<td>4,314</td>
<td>4,648</td>
<td>7,650</td>
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<tr>
<td>Tupelo, Mississippi</td>
<td>7,500</td>
<td>7,200</td>
<td>7,500</td>
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<tr>
<th>National Memorials</th>
<th>1938</th>
<th>1939</th>
<th>1940</th>
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<tr>
<td>Kill Devil Hill, North Carolina</td>
<td>80,911</td>
<td>70,071</td>
<td>54,729</td>
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<tr>
<td>New Echota Marker, Georgia</td>
<td>6,085</td>
<td>6,090</td>
<td>6,090</td>
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<tr>
<th>National Parkways</th>
<th>1938</th>
<th>1939</th>
<th>1940</th>
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</thead>
<tbody>
<tr>
<td>Blue Ridge, North Carolina-Tennessee-Virginia</td>
<td>*</td>
<td>*</td>
<td>750,000</td>
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<table>
<thead>
<tr>
<th>Totals</th>
<th>1938</th>
<th>1939</th>
<th>1940</th>
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<tbody>
<tr>
<td>Totals for entire National Park System</td>
<td>16,233,688</td>
<td>15,454,367</td>
<td>17,576,411</td>
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</tbody>
</table>

* Records not available
xx Record for 10 months only
xxx Estimated
Nature Decorates an Interior

Botany and zoology are replete with the evidences of how versatile a performer is Nature. At Castillo de San Marcos (now Fort Marion National Monument), the ancient coquina stronghold built by the Spaniards to guard Saint Augustine, Florida, she has played expertly in the role of interior decorator.

The photograph at the right shows the arched ceiling and one of the aged gray walls of a room in the fort. That room, unlike some of the others, is not grim and bleak and bare; it is fresh with a verdant tapestry of living lace: the Southern maidenhair fern.

*Maidenhair* (*Adiantum Capillus-Veneris*) is characterized by the glossy, lustrous, hairlike branches of the frond which give to the fern its popular name. Its resplendent pinna are divided in turn into pinnules or sections with scalloped or crenate edges. Under these tips, hidden within tiny chests of fiber, lie almost microscopic spores. Unaided by human hands, the tiny life germs broke free from the mother pinna and, borne by the wind, found a haven in the porous rock of which the fortress was constructed in the years following 1672. Seepage of moisture down through the walls and arches of the casemate has kept the plants alive because the minute chemical "laboratory" of the organism requires only moisture and a small amount of sunlight to enable it to manufacture food from the calcium of the shelly stone.

During the recent work program designed by the National Park Service to preserve the ancient casemates, or bomb-proof chambers, by waterproofing the roof, the needs of the maidenhair were not forgotten. The section of the roof covering the fern room was allowed to remain porous so that moisture could continue to percolate through the walls and feed the delicate fern.

Most of the quarter-million-odd visitors recorded each year at Fort Marion pause to ask questions when they reach the fern room, and many hundreds attempt, without spectacular success, to photograph the dainty fronds which sway almost continuously in their shaded retreat. —*F. Hilton Crowe.*
Mighty Assets of Youth

When President Roosevelt issued his call for major national defense preparation, the CCC was ready. It was ready because it had been engaged for seven and a half years on work and training projects designed to toughen the nation's moral and physical fiber and to put its house in order so far as the conservation of natural resources was concerned. In the years after the war, America became soft. The Corps for years has been actively at work through physical training, through careful medical attention and through hard work, bringing physical hardihood to a sizable portion of the young men who registered in the recent national draft. The CCC also has been training men as truck drivers, as mechanics, as road builders, as telephone linemen, as radio operators. Over the years it has built up a huge backlog of men trained in the very skills needed in the advancement of industrial defense and in the organization and strengthening of the military forces. About 80 per cent of the types of work which the CCC does trains men for national defense as well as for peacetime jobs.

When the President announced that the CCC would aid in the national defense program, there was but one thing to be done. This was to intensify those phases of our regular program which would contribute the most to national defense. This we have done to the limit of our appropriations. We are giving precedence to the teaching of such things as truck driving, the care and maintenance of automotive equipment, telephone line and road construction, and other kinds of work similar to that done by regular engineering or pioneer troops. We have intensified our physical training and development program.

Two and a half million boys have come into and been graduated from our CCC. No man will ever know the exact extent of the psychological improvement life in the Corps has brought about within those boys. But we can tell pretty clearly without calling in any high-sounding specialists. The boys who have come out of the CCC stand up straighter, they are sturdier, they speak up without hesitation, they know how to do a surprising number of things. They know how to do many of them exceedingly well. But, above all, they are more confident, for they are stronger, physically and spiritually. They are better equipped for democracy. They can better make decisions, for they are not afraid of the future. This nation has seen the creation of a mighty asset in natural resources through the labors of the CCC. But probably more important has been its creation of a mighty asset of trained, disciplined youth upon which the nation must ultimately stand or fall. I do not doubt the ability of young America to carry on in defending its country against any aggression, be it drought, flood or foreign armies. From an address of James J. McEntee, Director of the Civilian Conservation Corps.

AMERICA'S STATE PARK AGENCIES (continued from page 19)

be subordinated properly to their surroundings by location and planting. One of the factors materially affecting the costs of upkeep and operation is the building of "perception" in the minds of the general public. It may be built or stimulated by signs, arrests, exhibits, trails, publicity, and in many other ways.

Those who have observed the trend of recreational development during the last several years have not failed to note the numerous opportunities for better planning, development, and administration of state parks. Altogether, in the big program which lies ahead, a two-fold ambition will remain the goal of planner, developer, and administrator: that of assuring a maximum of human use and benefit, and a minimum of impairment of park resources.
WHEN PARK STAFFS GO TO SCHOOL

Georgia Training Course Attracts 69

BY EUGENE L. BOTHWELL,
ACTING DIRECTOR,
DIVISION OF STATE PARKS,
GEORGIA DEPARTMENT OF NATURAL RESOURCES.

For the last season or two we have been experiencing growing pains in our park system in Georgia. More and more we have heard a cry from our superintendents and custodians for help in solving the problems of operation and maintenance and especially the cry, "What can we provide for the park visitor in the way of recreation?"

Since 1933 our attention and main efforts have been expended, through the excellent cooperation of the National Park Service and other federal agencies, on the development of a complete and properly designed system of state parks, recreation areas, and historic monuments, in order that we may make available to the people of our state adequate outdoor recreation, and to protect and interpret our natural resources. Only recently have our growing pains brought home the fact that we have been concentrating on the development portion of our program to the neglect of operation and interpretation.

A careful study of the problem soon revealed that our field personnel needed information that best could be developed and distributed through the medium of group contact. A member of our staff attended a school at Kings Mountain Recreational Demonstration Area, sponsored by the South Carolina State Commission of Forestry, and brought back such an excellent report that it was decided to hold a similar meeting here in Georgia. To this end a Training School for State Park Employees was held October 14-17 at Pine Mountain Recreational Demonstration Area, near Chipley.

As a guide in preparing a program, each state park employee was required to submit to the office a list of questions he wished to have discussed. With these questions as a basis, a comprehensive program cov-
ering the field of park operation, maintenance, and interpretation was developed. The subjects ranged from such broad and inclusive topics as "The Public's Demand of a State Park and How to Meet it," and "The Scope of a Park Activities Program" down to concrete problems such as how to prevent water systems from freezing and how to prepare petty cash reports.

The first session of the program was devoted to a broad outline of the school in order to clarify in the mind of everyone the purpose of the meeting. From this point on, the sessions were planned to cover specific problems, gradually working down to more detailed questions. Discussion leaders were valuable in directing and guiding the program to keep the interest following the outlined path. As a result, the pattern followed provided a close and interrelated discussion and succeeded in keeping each problem in its own relation to the entire scope of a park program.

Although it had been planned originally to hold the school for our own employees, interest in the undertaking soon spread to adjacent states. In the end the 18 Georgia state participants constituted less than 30 per cent of the total attendance. There were five state park directors from other states; 11 specialists in geology, forestry, nature study, and related fields; a group of National Park Service employees including managers of recreational demonstration areas and project superintendents, and a dozen other interested observers. The final attendance record of 69 emphasized the need for study and consultation on all the varied problems of operation and maintenance not only in Georgia but also throughout the surrounding region.

One of the most glaring weaknesses of our field employees (as well as our office staff) has been a lack of knowledge concerning the park program in our own state, as well as in adjoining states. To overcome this deficiency, an exhibit was prepared to show by means of maps and plans the various park and recreational areas, both national and state, which are situated in the Southeast. Because such an exhibit could not be absorbed in the period of four days, we supplemented it by a large selection of publications, booklets, reports, and reprints of articles closely related to the subjects to be discussed. Thus, having stimulated our personnel to a desire for more information, we made available copies of this material for study during the coming winter season. As a result it is hoped that our employees will have a better knowledge of recreational facilities available in this section, and will be better able to interpret park resources to the public.

One of the big problems of a conference of this type is to keep the interest live and to get everyone to participate.
To accomplish this, each major topic on the program was followed by a discussion period led by a person qualified in that particular field. The effect of this method was enlightening, for the group joined wholeheartedly and in many cases disagreed with the speaker and the discussion leader, and many new thoughts were introduced. By actively participating, our employees received a great deal more from the meeting than they would have if they had merely sat and listened.

A further innovation was the use of panel discussions whereby the discussion leader was assisted by two or more specialists in the field under discussion. We found that by this device we were able to get varied thoughts on the same subject and quite often this method provoked discussion among the leaders which served to bring out points that otherwise might have been overlooked. Especially valuable on the program were the field trips included as a part of the session on naturalist programs. The trips were a welcome relief from the indoor sessions, and served as demonstrations of the use of field trips as part of the park interpretive program.

Because we planned to do so much and had so little time for doing it in, we scheduled a campfire program for each evening. These were planned so that the group could have some relaxation and yet, at the same time, some serious subject matter was introduced. These sessions were planned also as a demonstration of how campfire programs fit into the general activity program of a park. At the last campfire, the responsibility for the program was placed on several of our superintendents, none of whom had had previous experience. Much to our surprise and gratification this particular campfire turned out to be the highlight of the entire session and several of our men left determined to start similar programs in their own parks.

To assist the participants in the meeting to assimilate and digest the vast amount of technical information outlined by the various speakers, it was thought advisable to devote a session at the end of the meeting to the preparation of a brief résumé of the ground covered by the school. The leader found it necessary to prepare in advance a tentative outline, and, by questions and suggestions, the field personnel were led to participate in the actual résumé as written on the blackboard by the discussion leader. This method of recapitulating the information produced by the school, in a graphically presented outline, was a big aid to the participants in reviewing the ground covered by the speakers and in emphasizing the highlights of the subjects discussed. In addition, a stenographic summary was kept and, as soon as the notes are transcribed and edited, it is planned to send them to our field men. In this way they will have a written reference to which they may turn to refresh their memories.
It would be difficult, of course, to try to evaluate at this early date the effectiveness of the training school. Yet, certain tangible results already noticeable are:

(1) A definite accumulation of views, ideas, and suggestions which will prove helpful in preparing next year's programs for the individual parks.

(2) A stimulation, in our field men, of interest in an interpretive program.

(3) An opportunity for the exchange of ideas between the employees of the various parks, and a clearer realization of the mutual problems faced by park personnel, both within and without the state.

(4) An opportunity for field men to see and visit Pine Mountain State Park and Recreational Demonstration Area.

(5) A demand by the personnel for an annual meeting similar to this one, which has led us to start plans for a similar school next year at Alexander H. Stephens Recreational Demonstration Area, near Crawfordville.

(6) A definite suggestion that a similar school or conference be held of the state park officials in the several states in the Southeast.

To the writer and, we believe, to all participants, the school was a revelation, in the vast amount of information that is available to aid in the proper operation, maintenance, and interpretation of our parks. The participation in the meeting by our colleagues from adjacent states greatly broadened the scope and benefits of the school and we are glad to acknowledge the assistance given us by them. In the past we have been accorded the full cooperation of the National Park Service in the development of our park areas, but before this meeting we had not realized the full potentialities of the assistance which could be obtained from the National Park Service in meeting the maintenance, operation and interpretive problems confronting us. We hope that as a result of this meeting, the National Park Service also may come to a fuller realization of the enviable opportunities which are afforded it to be of service to state park organizations, not only in the development of park areas, but also in plans for the maintenance, operation, and interpretive programs which properly follow such development.

GREAT SMOKIES SALAMANDER LIST INCREASED TO 27 SPECIES

Collection of two new species of salamander (*Hemadactylium scutatum* and *Leurognathus marmorata*) has brought to a total of 27 the list checked in Great Smoky Mountains National Park, Tennessee-North Carolina. Members of the park staff believe the total is greater than that for any area of similar size in the United States. Collection of the small cricket frog (*Acris crepitans*) and a new turtle (*Pseudemys troosti*) has increased the list of amphibians and reptiles to 74.

The finding of an American brant in the park, a record for the state of Tennessee as well as for the park area, and of an orange-crowned warbler has raised to 198 the number of bird species listed in the Great Smokies. Studies are being continued meanwhile with respect to park flora and it is expected that a list of flowering plants soon will become available. Their estimated total is between 1,200 and 1,400.
Publications and Reports

ORIGINS OF SANTA ROSA LIVE OAK RESERVATION DESCRIBED

Alabama Conservation, to be published monthly by the Alabama Department of Conservation as a successor to Alabama Fish & Game News, made its appearance in November under editorship of Neilson B. O'Rear, formerly state editor of The Montgomery Advertiser. The new journal will be devoted to state park, forest, and wildlife activities.

One of the most interesting articles of the first number, "First Reforestation Effort Started in South to Provide Sturdy Timbers for U. S. Warships," describes the origins of the naval live oak reservation which is adjacent to Santa Rosa Island National Monument, at Pensacola, Florida. It is not claimed that the Santa Rosa area was the first live oak reservation, but it is considered probable that the first national attempt at reforestation and forest management was made off Pensacola.

"John Quincy Adams, sixth President of the United States and known as the 'tree planting Mr. Adams,'" the article explains, "fostered the work which was undertaken on the peninsula of Santa Rosa which juts out into Pensacola Bay. He knew what sea power meant to a nation and what the forest in that day meant to sea power; he comprehended full well the problem that oak for sail of the line presented. Passionately patriotic, Mr. Adams wanted the dignity and honor of America upheld throughout the world. During his service as Secretary of State, he negotiated with Spain the treaty under which Florida, noted for its live oaks, was ceded to the United States. He knew the value of a powerful fleet when the Monroe Doctrine was enunciated, for pronouncements of that sort are ineffective unless there is force behind them.

"When Mr. Adams became President, one of the first acts of his administration was the establishment in 1826 of a navy yard at Pensacola central to the live oak region. On January 12 of the following year Delegate White arose in Congress and moved "to enquire into the expediency of forming plantations for the rearing of live oak for the future supply of that timber for the Navy of the United States." The President had already issued orders that acorns of the live oaks should be planted wherever possible at the new navy yard. Across Pensacola Bay from the navy yard lay Santa Rosa peninsula which for the most part was public land. The President had it withdrawn from entry and persuaded Congress to have him the necessary legislative authorization to grow and experiment with the live oak. Thus was established late in 1828 the first forest experiment station in America."

After Judge Henry M. Brackenridge, of Pensacola, a botanist of some note, had been placed in charge and work was begun, there were differences of opinion concerning the desirability of planting acorns, but the President commented: "... the natural history of the live oak has not yet been duly observed. Among my reasons for desiring that a considerable plantation of them should be raised from the acorn is, that their growth to maturity may be observed, and perhaps a better knowledge of them be obtained." Accordingly, acorns were planted, wild seedlings transplanted, and natural growth was given cultural treatment.

"When the administration changed and a new President came into office," continues Alabama Conservation, "there was considerable political opposition which resulted in
the Secretary of the Navy serving notice on Judge Brackenridge that the work at Santa Rosa was going to terminate January 19, 1831, two years after it had been commenced. That marks the end of Santa Rosa as a forestal experiment. Under later secretaries a little clearing was done under direction of the naval officers attached to the Pensacola Naval Yard, but the object was merely to preserve the improvements made under Judge Brackenridge. Ex-President Adams was bitter over the turn of events for he wrote in his diary:

"The malicious pleasure of destroying everything of which I had planted the germ and the base purpose of representing as wasteful prodigality the most useful and most economical expenditures are the motives that act upon the Secretary of the Navy and the present administration. The plantation both of young trees growing when I commended it and those from acorns which I had caused to be planted is now in a condition as flourishing as possible and more than 100,000 live oaks are growing upon it."

"We do not know what future historians may say about the good works of President Roosevelt," the article concludes, "but should they fail to mention the militant stand taken by the President for the conservation of our natural resources, the oversight may be readily forgiven, for his memory will be inscribed on our living trees as is that of the tree planting Mr. Adams, for believe it as you will, remnants of the live oak trees planted under his direction still rear their heads to the heavens with numerous offspring ready to take their place in the sun when the forest trees succumb to old age and the ravages of the elements."

NATCHEZ TRACE PARKWAY ISSUES BULLETIN

The Natchez Trace Parkway Bulletin, a neat four-page multilithed folder, has been launched by the national parkway which is to follow the ancient route connecting Natchez, Mississippi, and Nashville, Tennessee. The purpose of the new bulletin, says the first issue, is "to tell something of the history of the Natchez Trace, explain the policies to be followed in its development and use, and discuss other matters of mutual interest to our neighbors and to us. Some of the matters which will be discussed in early issues are protection; fire, its prevention and suppression; access problems; and the leasing of parkway lands.

Three brief articles in the bulletin trace the historical background of the famous route, explain the major differences between a conventional highway and a protected parkway, and give a summary of the progress and status of construction and development. The first grading and drainage contract was let in 1936 to provide for an initial 12-mile stretch. Since that time an additional 35 miles have been graded, and another 30-mile link is under construction. A stretch of 25 miles just north of Jackson will be opened to use soon.

An interesting feature of the bulletin will be a series of illustrations (see accompanying drawing) showing the distinctive hairdress styles of the various Southern Indian tribes.