THIS MONTH

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THE UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
REGION ONE — RICHMOND, VIRGINIA
TRAIL SYSTEM OF GEORGIA AND SOUTH CAROLINA IN EARLY COLONIAL DAYS
(Adapted from a map published in the 42nd Annual Report, op. p. 748, Bureau of American Ethnology)

1. Cisca-St. Augustine Trail
2. Lower Creek Trading Path
3. Augusta, Macon, Montgomery and Mobile Trail.
4. Old Path from Fort Charlotte to the Cherokee Country
5. Old Cherokee Trading Path
6. Lower Cherokee Traders' Path before 1775
7. Trail from Fort Moore (Augusta) to Charleston
8. Occaneecchi Path
9. Charleston-Fort Charlotte Trail
10. Augusta-Savannah Trail
11. Charleston-Savannah Trail
12. Tugaloo-Apalachee Bay Trail
13. Old Indian Path between Tugaloo and Coosa
14. Trail from Augusta to the Cherokee via Fort Charlotte
15. Augusta-St. Augustine Trail
16. Old Trading Path from the Savannah to Pensacola
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18. Trail from Winyah Bay to the Cheraws
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20. Trail from Jacksonville to mouth of the Flint River
21. Middle Creek Trading Path
22. Old South Carolina Road to North
THE REGIONAL REVIEW

OCMULGEE'S TRADING POST RIDDLE

Edited by Roy Edgar Appleman,
Regional Supervisor of Historic Sites,

From Researches Conducted by
A. R. Kelly,
Chief, Division of Archeologic Sites,
Branch of Historic Sites,
and
Louis Friedlander,
Student Technician in History (1938).

Note: In 1936 archeological work under direction of Dr. Kelly on the middle plateau section of Ocmulgee fields, near Macon, Georgia, revealed unmistakable evidence of what in all probability was a trading post established among the Creek Indians during the closing years of the 17th century by English traders working out of Charleston, South Carolina. The discovery came as a surprise because there were no known historical records concerning a trading post or a fort at this location for the early Colonial period. An interesting archeological-historical problem thus presented itself. Archeology demonstrated the existence of an establishment growing out of early contact between the Southeastern Indians and the whites from nearby colonies. Recorded history, so far as known to us, is silent on the subject.

Last summer, in an attempt to establish by historical documentation the existence of a trading post on the Ocmulgee to agree with the evidence uncovered by the archeologist, a student technician, Louis Friedlander, of Columbia University, was assigned to the task of examining the Colonial records and archives at Columbia, South Carolina. It was believed that there, if anywhere, would be found documents bearing on the problem. He spent several weeks without finding a single direct reference to a trading post on the Ocmulgee near the present city of Macon. Sixteen volumes of the Calendar of State Papers for the period 1690-1715 were examined but they yielded no specific information on the subject. It has not been possible to make anything approaching a complete examination of all the early South Carolina records because they have never been indexed and arranged in such form that they may be readily used. Considerable material was found, however, to substantiate strongly the inference that a trading post might have been established at Ocmulgee. For the present, there remains unsolved a fascinating problem of historical research, one which must receive further attention if we are to develop and interpret adequately for the public the potential contributions which this site has to offer in knowledge of the prehistory and history of the Southeast.

Verner W. Crane, Professor of History at the University of Michigan, an outstanding authority on the Southeastern Indian frontier, in a letter dated September 30, 1938, comments on the lack of precise information in the early Indian books and Colonial records regarding trading establish-
ments. He states that he has found "Descriptions of trading posts in
the south are practically non-existent," and offers the suggestion that
this is so, "probably for the reason that the references to them are made
not by travelers writing for the general public, but by traders and a-
gents in reports to persons who need no descriptions." He has suggested
the Ocmulgee post may have been associated with the enterprises of a
trader named John Bee, who, according to Dr. Crane's own research, "main-
tained a trading factory on the Upper Ocmulgee for some years after the
desertion of the Lower Creeks and in 1725 took out licenses for a 'par-
cel of traders' to the Choctaw.'"

The following resume of the Archeological findings at the site of
the supposed trading post are taken from, "A Preliminary Report on Arche-
Bureau of American Ethnology, (Anthropological Papers, No. 1), Smith-

A five-sided enclosure was worked out in its entirety. There was a
broad base side, 140 feet long, facing the river toward the northwest.
Two shorter sides or legs set at right angles to the base extended south-
east 40 feet. The two remaining sides converged to form a triangle or
gabled point directed southeast. The two sides forming the apex of the
five-sided enclosure were 100 feet in length. The footing ditch, for
such it was now perceived to be, had two breaks in its continuity in the
base or front. One of these was 12 feet wide, the other 5 feet wide;
they were apparently gates opening into the stockade from the river ap-
proach.

There were no remaining indications of decayed wood found except
for the darker discolorations or black organic mold with thin discontin-
uous water-laid sand laminated between the darker soil areas. Vertical
profiles through the footing ditch indicated horizontally laid logs
probably pegged together. Early difficulties in planning the area to
discover post molds were thus explained.

Inside the enclosure were rectangular areas of dark soil suggesting
the decay of numerous logs. These were considered to be indications of
what had once been cabins or storerooms.

Both in and around the enclosure were found burials of Indians of
all ages and sexes associated with European trade artifacts and objects
of Indian manufacture, including pottery. A number of burial tracts not
previously observed were encountered. The prevailing custom of primary
flexed burials was noted, corresponding in this respect to burials at
Lamar and other sites. However, the presence of artificial frontal de-
formation in a number of burials implied that this custom was much more
prevalent in historic than in prehistoric times. Also several burials,
again associated with European objects, were definitely cremated. The
calcined bones had been heaped together and buried with guns, knives,
axes, beads, iron ornaments, and other items.
In addition to the burials in and around the enclosure there were numerous indications of house sites in the form of broad oval wall continuities traced out from post-hole alignments. The tendency for large domestic pits to be located in the center of these simple timber houses was noted in several instances and generous quantities of pottery, animal bones, flint scrap, and artifacts, scattered European objects, including some glassware and crockery, were taken from the fill. The houses were small, usually not exceeding 15 feet in diameter, and were sometimes smaller.

The implied construction consisted of light sapling wall timbers probably bent and tied to form the roof, with brush or reeds covering the whole. Sod might have been used also but this was not evidenced in the débris.

In addition to the house sites numerous refuse pits not definitely associated with post-hole indications of house floors were uncovered. Midden materials found in situ on the occupation level on which the houses were troweled out added to the data of exploration around the enclosures.

Another interesting feature was the profiled indication of a beaten trail terminating in front of the entrance to the trading post site. In profile the trail appeared as a ditch-like excavation 6 to 8 feet wide varying from 14 to 24 inches in depth. A bluish mucky clay fill in the bottom of the trail impression implied gradual deposition of clay sediments in stagnant water. The upper fill consisted mostly of water-laid of wind-blown sand.
The same trail indications had been followed at 50-foot intervals all the way across the plateau from a point at the extreme northeast rim margin beyond the outer dugout series north of Mound D to a point converging on the entrance of the trading post. The total extent of the trail thus surveyed was approximately three-quarters of a mile. Beyond the entrance to the enclosure the trail was picked up again in profile and carried southeast toward the river, dropping down from the plateau below the lower west slopes of Mound B. Beyond that point present explorations have not been attempted to trace the trail to its intersection with the river. In the plain below the plateau in all likelihood river erosion has destroyed any vestiges.

Another structural feature of importance was brought out in final exploration around the footing ditch. This was a moat-like ditch, separated by an average distance of 20 feet from the footing ditch, which indicated the line of the trading post stockade. The borrow ditch ran parallel to the footing ditch around four of the sides. It did not extend in front of the broadest or base side. The width averaged 10 feet with gently sloping sides; the depth varied from 2\(\frac{1}{2}\) to 3 feet. The fill showed a bluish mucky clay in the bottom with water-laid sands and loams in the top fill. Midden accumulations, refuse pits which had been cut through in the process of making the moat-like ditch, burials made in the floor after the excavations were made, all served to substantiate the view that the ditch was obviously related to the structure of the five-sided enclosure.

The quantity of European trade materials found in midden, house site accumulations, and definitely associated with burials, indicated a rather numerous population of historic Indians living around a trading post which seemed at a later date to have been partially fortified. The interpretation of the moat-like ditch is still in doubt, although five-sided wall enclosures with moat-like ditches surrounding the walls were a frequent construction in the seventeenth and eighteenth century colonial fortifications of the Southeast. The catalogued European materials exhibited a large number of finds which were weapons of war. In addition to the guns, knives, swords, and pistols found with burials, there were scores of gun flints, molded lead bullets, brass buckles, buttons, and other objects suggestive of military equipage. In contrast with these materials were many trade objects, such as beads, clay pipes, coiled iron wristlets, copper and brass sheets sometimes rolled into small funnels or into cylinders. Several burials of children and women with beads and other trade trinkets were catalogued from the area.

The field data previously summarized seem fairly conclusive to the effect that general exploratory trench explorations had come upon the site of a large and thriving trading post. The military character of many of the European finds seemed on first impressions to be too evident to suggest an ordinary establishment set up primarily for trade. The presence of 50 burials representing individuals of various ages and sexes denoted the existence of a stable population and probably a fairly sizable community, as these interments had been uncovered in only so much area as was represented in general trench exploration.
Note: The following extracts from Mr. Friedlander's historical research report (typewritten manuscript, September, 1938) on the Ocmulgee trading post problem indicate the general field of English and Spanish trade relationships with the Southeastern Indians and the general character of Colonial rivalry involved in early white contact with the aboriginal occupants of what is now Southeastern United States. Considering the historical circumstances of period and environment, the establishment and operation of a trading post at Ocmulgee would appear to be convincingly logical.

Throughout the Colonial period, the Indian trade was the chief instrument of Carolinian expansion. Its importance can readily be seen in the active Indian traders in attempting to win the friendship of the Lower Creeks away from their previous Spanish alliance to an active English one. The urge of a highly profitable trade led the English traders further into the wilderness in this region than they were wont to venture in the north. By 1700 "they were in contact and in keen rivalry not only with the Spanish of Florida, but also with the French in the region of the Gulf and the lower Mississippi."(1)

The first Englishman to make contacts with the Creeks was Henry Woodward. Probably in 1670 and certainly in 1685, Woodward journeyed to the villages of the Creeks on the Chattahoochee. This was the region of their early home before their migration in 1690. It is safe to say that Woodward must have passed through Ocmulgee fields on his journey westward—this being the shortest route to the Creek villages. But definite proof of this is lacking.(2) We are certain though that "both at Coweta, the 'war town,' and Kashita, 'the peace town,' the English with their trading goods were cordially welcomed."(3)

The final victory of English diplomacy resulted in the movement of the Lower Creeks, about 1690, from their old home on the Chattahoochee

(1) Crane, Verner W., The Southern Frontier (1928) p. 22
(2) Ibid., pp. 17, 35.
to the region on the upper Ocmulgee, the primary reason for this being that they would be closer to the source of the English trade and in a direct line with Charleston over the Lower Trading Path which connected with their settlement via Savanna Town (near present-day Augusta). (4) It was the lure of cheap English goods that decided the contest between English and Spanish traders. "From the western River the Lower Creeks now migrated eastward to the upper waters of the Altamaha. Most of their new towns were placed along the Upper Ocmulgee River, known to the English as Ochese Creek. There for the next quarter century was maintained the great center of the southern Indian trade. Goods for this trade were sent by packhorse, periago, or Indian burdeners, to the inland entrepot at Savanna Town, on the left bank of the Savanna at the falls. An early map shows also 'the Old fort' on the right bank, near the site of Augusta. An outpost apparently, of the Carolina traders, this was probably the first English establishment upon the soil of Georgia. From Savanna Town...most goods were transported southwestward, by two trails which branched near the Ogeche River. One, the Upper Path, led to Coweta Town; the other, the Lower Path, to the settlements of the Ocmulgee and Hitchiti nearer the forks of the Altamaha. All Georgia, under Creek sway, was an English sphere of influence." (5)

Thus the importance of trade on the upper Ocmulgee is clearly established. We would naturally expect to find numerous references to the establishment of a trading post at Ocmulgee Fields to substantiate the archaeological evidence of one found by Dr. A. R. Kelly in 1936. But the lack of material on this particular point is surprising.

Until 1715 the English controlled the trade of the Lower Creeks. Governor Nathaniel Johnson showed a keen realization of the importance of their trade when he declared in an official report that the Cherokee were "a numerous people but very Lasey," and their trade inconsiderable in comparison with the flourishing southern and western trade of the Creeks who were described as "Great Hunters and Warriors and consume great quantity of English Goods." (6)

Not only was the Ochese Creek country important in itself for trade but "it soon became a base for the further extension of trade....From the Ocmulgee were sent out many of those slave-taking expeditions against Florida, and, later, against Louisiana, which provided an outlet for the warlike energies of the Indians, enriched the traders, and served to weaken the defenses of the rival colonial establishment in the South." (7)

(4) Crane, Verner W., The Southern Frontier, p. 34
(7) Crane, Verner W., The Southern Frontier, p. 36
In 1708 the first Commission to control the Indian trade was established in Charleston. The Journal of the Commissioners for the Indian Trade is an invaluable record and from it can be obtained the names of the traders with the Lower Creek Indians. The agents of the Commissioners and very often the traders themselves were required to make reports on conditions and the extent of trade among the Indians. These reports are not contained in the Journals and if they could be found they would almost certainly provide a wealth of material on the post at Ocmulgee. The Journals themselves are bare of material immediately relevant to a trading post at Ocmulgee Fields. The most important traders with the Lower Creeks as indicated by the Journals were John Chester, John Weaver, Richard Gower, William Britt and Samuel Everleigh. All references to their names in the Journals have been followed but nowhere is an Ocmulgee post mentioned. Samuel Everleigh is especially important because it was he who supplied the traders with merchandise for the Creek trade. (8)

During Queen Anne's war (1702-1713) the region surrounding Ocmulgee became extremely important because of the fact that it served as a frontier line between the Spanish and English spheres of influence. The anxiety of the colony in regard to the friendship of the Creeks is shown by a letter of Governor James Moore in 1702 in which he writes, "That you think of Some way to Confirm ye Cussatoes who live on Ocha-Sa Creek & ye Svannos in the place they now live in, and to our friendship they being the only People by shorn Wee may expect Advice of an Inland Invasion." (9)

In 1702 Queen Anne's war was precipitated in America by Anthony Dodsworth, often referred to as "Captain Antonio." It was he who led a force of 500 Creeks from Coweta to the Flint River to defeat the advancing force of Spaniards and their allies the Apalachees. Dodsworth is an elusive figure in the history of the period and conclusive evidence is lacking to the effect that he was ever at Ocmulgee. Nor can we be certain as to what part he played in Moore's expedition in 1703, although we know that it was he who urged the Commons House of the necessity of sending out the expedition. It was at the Creek villages on the Ocmulgee, the site now included in Ocmulgee National Monument and within which the archeological evidence of what is thought to have been a trading post has been found, that James Moore in 1703 fitted out his expedition in company with fifty Carolinians and concentrated 1,000 Indian allies on the meadows beside the post, armed them and proceeded south to where he defeated a large force of Spanish and Apalachee Indians. (10) The Journals of the Commons House of Assembly record that "Coll. Ja. Moore be commissionated to Raise a Party of men to go to ye Assistance of ye Cowetaws, And other our friendly Indjans, And to Attaque ye Appellaches and allso to Concurr with this House in Sending a Present to ye sd Indjans our ffriends And present the Same To this House To-morrow Morning." (11)

(10) Crane, Vorner W., The Southern Frontier, p. 79.
(11) Journals of the Commons House of Assembly, p. 103.
The only letter we possess of James Moore at this time is a report to the Governor on his victory over the Spaniards and their allies, but it does not contain any information on Ocmulgee itself. (12). Certainly Moore must have written back to the Governor from Ocmulgee or kept notes himself on the beginnings of the expedition.

Moore was a visionary governor and he developed a conception of the destinies of England in this quarter of America far in advance of his times. Under his governorship South Carolina trade was actively fostered and, indeed, it was hard to distinguish between the leaders in the trade and the leaders in government. He saw the necessity of destroying Spanish influence among the Southern tribes and therefore his records are especially important.

Sir Robert Quary, King's Commissioner of Customs stationed at this time in the South, has a good description of the consequences of Moore's expedition of 1703 and gives an enthusiastic estimate of the importance of his campaign in a report back to England. (13) But this report also lacks definite information on Ocmulgee.

Research is aided by the fact that we can pin down the probability of establishing the post to within a definite number of years, that is, from about 1690 to 1715. The Creeks migrated to the Ocmulgee about 1690 and emigrated back to their old grounds on the Chattahoochee in 1715 after the Yamassee Wars. (14) Governor Johnson's report to the Board of Trade in 1719 is interesting in so far as he records the beginning of the latter war. His report says, "By the within Account of the Number of Indians Subject to the Government of South Carolina in the year 1715 Yo Lord pe will finde upwards of Eight and twenty thousand Souls of which there was Nine thousand Men, which traded for above 1,000 lbs sterling Yearly in Cloth Guns Powder Bullets and Iron Ware and made return in Black Skins Doe Skins, Furs and other Peltry and there was one or other near 200 English Indian Traders employed as Factors by Ye merchants of Carolina Amongst them; But in ye Said Year 1715 most of them rose in Rebellion and Murdered ye Said Traders & Severall of the Planters and their Family' that lay most exposed to them." (15)

While the information now known to us does not permit any definite or conclusive statement based on historical records, regarding the question posed by the archeological discoveries at Ocmulgee, the weight of indirect evidence strongly supports the hypothesis that a trading post was established there among the Creeks by the Carolinian traders.

(12) This letter is reprinted in Carroll's Historical Collections of South Carolina, Vol. 2, pp 574-76
(14) Records of the British Public Record Office relating to South Carolina, January 12, 1719-20, p. 235.
(15) This migration is clearly established in Bolton & Ross, Spanish Resistance to the Carolina Traders, GTO, Vol. 9, p. 115.
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CONCESSIONS PROHIBITED ON OVERSEAS PARKWAY LINK

A forthright decision governing the preservation of natural features along a 44-mile section of Florida's new Overseas Parkway, which leads for 100 miles over ocean and islands to the Key West terminus, was announced recently when commissioners of the Overseas Road and Toll Bridge District rejected all applications of firms and individuals seeking permission to install commercial and amusement enterprises. Protected by the new guarantees is the scenic link which extends from Lower Matecumbe to Big Pine Key. It includes Long, Grass, Vaca, Knights and Boot Keys as well as a long stretch of the tropical, over-water route just west of Marathon.

Commenting on the ruling, The Miami Daily News said editorially: "By a notably intelligent and courageous decision of the Overseas Road and Bridge District Commissioners, the incomparable marine highway to Key West has apparently been saved from becoming a Coney Island... In so doing, the Commission decided to follow the standards set by the National Park Service in regard to similar natural wonders.

"Perhaps it seems strange that the Commission would even consider the flood of propositions to superimpose commercial sideshows upon one of the world's most unusual engineering enterprises and most compellingly beautiful bits of natural scenery. This will not, however, be the conclusion of anyone who is familiar with the power of the pressure that would-be concessionaires can bring to bear on such projects... May the Commission's attitude suffer no relapses."

The National Park Service and the Civilian Conservation Corps are cooperating with four Florida state agencies in a development and protection program which is being carried forward along the unique parkway. Plans provide for conservation fundamentals rather than for structural and recreational undertakings. (w Regional Review, Vol. I, No. 1, pp. 5-7).
TO MOVE A MOUNTAIN — AND MAKE A WINDOW

By H. S. Ladd,
Regional Geologist.

Geology is a science that has been accused of telling many "tall tales" but few of them exceed the one that I propose to relate — for it is taller than the Great Smoky Mountains. Many people are awed by a visit to the mountains. The vast distances and the towering cliffs impress them with a feeling of solidity and permanence, leading those who are poetically inclined to speak reverently of the "eternal hills." It is not surprising, therefore, that even college Freshmen assume an incredulous expression when they are informed that the Appalachian Mountains were formerly twice their present height and that they have been elevated and worn down—not once, but several times. People find it difficult to believe such things about mountains. How then, will they react to the contention of geologists that the Great Smokies, in addition to being elevated from the sea, have been shoved horizontally from southeast to northwest for a distance of 15 miles? Let us first try to move the mountain — later we shall "make the window."

Anyone who has visited the Great Smoky Mountains National Park and has ridden over the sweeping curves of the new road that climbs nearly 4,000 feet from Gatlinburg, in Tennessee, to the divide at Newfound Gap and then descends southeastward to Cherokee, in North Carolina, has seen one of the finest geological sections exposed in this part of the world. In road-cut after road-cut there are layers of rock — slates, quartzites and conglomerates. In many cuts the layers are tilted at high angles. An Englishman, famed for understatement, would observe that there is a great deal of rock in the Great Smoky Mountains.

The simple part of this tale deals with the formation of these rock layers. They were laid down in the sea as muds and sands and gravels. At one time they probably contained the remains of various animals that lived — and died — in the sea where the sediments were accumulating. So far as we know, all traces of such organisms
Slate in Road Cut at Newfound Gap

were destroyed by the heat and pressure that changed the muds into dense slates, the sands and gravels into hard quartzites.

In speaking of "pressure" we are using the word in a broad sense to include a simple force like gravity -- that will compact the lower layers of a thick mass of sediments -- and certain other forces that we may call mountain-building forces about whose exact nature geologists are not in complete agreement. It is not necessary, however, to understand the causes of the pressure to recognize that it has operated. In talking about such forces the geologist is in a position comparable to that of the biologist when he talks about evolution. All biologists see the results of evolution, they agree that it has occurred and that it is still functioning but they disagree on causes and methods. So, too, the geologist sees many mountains have been built by pressure and are still being built -- some by vertical uplift, others chiefly by horizontal compression. He sees the tilted and folded rocks, the breaks (faults) that are planes along which one mass has moved relative to another. In the case of the Great Smokies both vertical and horizontal pressure functioned. The surface of the earth first wrinkled like the skin of a drying apple; finally the forces of contraction became so great that the skin broke and one section overlapped the other -- a magnificent overlay of fifteen miles!

At the time this event occurred erosion had not etched out the Smokies to make the forms we see today. The mass that moved northwestward was thicker still but the northwestern edge of this huge segment was comparatively thin and it is to this edge that we must go to find evidence to substantiate the "tall tale" that we are telling and to "make our window."

Before doing this we must grow slightly technical for a moment and refer to one of geology's fundamental laws -- "The Law of Superposition." This "law" merely calls our attention to the fact that when a series of beds of sediment is accumulating the last-formed bed lies on top and is younger than those below it. By studying undisturbed sections of rock the geologist learns what the "normal" sequence of beds is in a given area. When, in some nearby area, he finds the layers tilted, folded, overturned, or in some other unusual relationship, he can make comparisons and try to discover what has happened.
We return now to the northwest edge of the Great Smokies to look at the evidence of the postulated 15-mile "shove." We must bear in mind that the rocks of the Smokies themselves are highly altered rocks that are known to be very old. By working out normal relationships in other areas, geologists have found out that they are very much older than the belt of fossiliferous limestones and dolomites that borders the Smokies on the northwest. The relations of these younger limestones to the older rocks of the Smokies may be seen clearly in a road cut on Little River -- an exposure that, unfortunately, lies just outside the Park boundary. At this place we see -- as shown in the illustration -- that the law of superposition has been violated. The older rocks lie on top of the younger ones. The plane of contact is exposed to casual observation. The rocks close to it are sheared and broken. A multitude of cracks developed in the limestone by the shoving were filled later with crystalline line to become a multitude of veins. Looking at this exposure one can visualize the mass of slate overriding the layers of limestone. The slates, in doing this, picked up masses of the younger rock and such masses -- underlain and overlain by slate -- now are exposed in the road cut. Admittedly, however, the visible effects of the movement are very local. Dr. Geoffrey W. Crickmay, of the University of Georgia, and the writer collected identifiable fossil shells in the limestone only 400 feet from the exposed fault plane. Obviously more evidence of the postulated shove would be in order so we turn to the line of "coves" that border the northwest side of the Smokies -- for these are our "windows."

As stated earlier, the edge of the overthrust mass was comparatively thin. Even before it came to rest the mass was being attacked by the forces of erosion. Possibly because of original differences in the thickness of the edge, or because of inherent weakness in the rocks at certain places, this erosion did not progress uniformly. Holes were excavated near the edge and in the bottoms of these holes the younger limestones were uncovered. These are the Coves of the Smokies -- great steep-sided basins, some exceeding 1,000 feet in depth. The Germans call them "fensters" because through these "windows" in the overthrust older rocks we may see the younger rocks beneath.

![Structural cross-section from Maryville, Tenn., southeastward to the southeastern corner of the Knoxville quadrangle. Section according to the geologic map of the U.S. Geological Survey Folio No. 16. (Drawn by Chas. W. Wilson, Jr., in the Journal of the Tennessee Academy of Science, Vol. X, No. 1, p. 61).](image-url)
STORM HAVOC AT BEACH POND RECREATIONAL DEMONSTRATION AREA, RHODE ISLAND

The two views shown above are typical of conditions against which Service-supervised workers are contending in the rehabilitation program being carried out in the hurricane-torn states of New England.
Most aspects of America's colonial development classify themselves naturally in accordance with a scheme which observes the performance of the immutable laws of environment and national ancestry. So it is with her historic gardens. From the New England Puritans in the north to the Spaniards in the far south there may be seen an inevitable diversity of expression evolved from opposed influences. From the severely enclosed Puritan gardens, through the neat trimness of the plots of the painstaking New York and Pennsylvania Dutch, to the spacious areas of the tobacco planters of Virginia, and ending in the south with the careless style of the Spaniards, the influences of environment and heritage are manifested.

Unlike the New England Puritans who came to America to avoid persecution and to establish settlements where they might conduct their religious life without intervention, the Virginia settlers were tradesmen, farmers, skilled artisans, and, in many cases, persons of means who came in search of adventure. Contrary to a popular belief, all of them were not dandies and gallants whose only skill concerned the use of fighting implements, and, despite hardships to which they naturally were unaccustomed, within a short time of their arrival "a garden was laid off, and the seeds of fruits and vegetables not indigenous to the country" were planted. Unfortunately few records of the names of these fruits and vegetables were made.
Type described by Thomas Aubrey.

Some early enclosures.
Some Later Types of Enclosures
Tobacco was one of the first crops planted, and its cultivation is one of the primary influences in the development of the widely separated estates so typical even now of Virginia. Because these estates were established so far apart that communication with other sections was difficult, each naturally tended to become a tiny unit sufficient unto itself and responsible for raising and producing all the materials necessary for the well-being of its inhabitants. The plantations were enlarged continually in order to embrace the rich new soil necessary for the growth of tobacco, and the ultimate result was the formation of a series of tiny kingdoms, which, with the later importation of slaves, became increasingly self-sustaining. The planters provided also for their own herbs and "simples" which, in the absence of doctors, were so necessary in case of illness or injury. Other crops were raised, of course, and the logical route for distribution of these, after they were gathered, was by water -- the cheapest and most accessible artery of commerce.

Instructions to Governor Berkeley in 1641 provided that every colonist holding 100 acres of land should establish a garden and orchard carefully protected by a fence, ditch or hedge. Governor Berkeley himself had 1,500 apple, peach, apricot, quince and other fruit trees which must have been so protected. This safeguard was undoubtedly, in the majority of cases, the "rail fence" so typical of Virginia, which could be taken down and moved. A description of one of these fences, as given by Thomas Anburey in 1689, is interesting.

"The fences and inclosures in this province," he said, "are different from the others, for those to the northward are made either of stone or rails let into posts, about a foot asunder; here they are composed of what is termed fence rail which are made out of trees cut or sawed into lengths of about 12 feet, that are mould or split into rails from 4" to 6" diameter.

"When they form an inclosure, these rails are laid so that they cross each other obliquely at each end, and are laid zig-zag to the amount of 10 or 11 rails in height. Then stakes are put against each corner, double across, with the lower ends drove a little into the ground, and about these stakes is placed a rail of double the size of the others, which is termed the rider, which, in a manner, locks up the whole and keeps the fence firm and steady.

"These enclosures are generally 7 to 8' high, they are not very strong, but convenient, as they can be removed to any other place; from a mode of constructing these enclosures in zig-zag form, the New Englanders have a saying, when a man is in liquor, he is making Virginia fences."

Other forms of enclosures mentioned in early literature are the hedge-row and the paling, which was undoubtedly the forerunner of the picket fence. These pales were sharp-pointed stakes driven into the ground, set close enough together to bar even the smallest animal, and fastened top and bottom to a horizontal stay. It was this type of fence which surrounded the gardens and orchards in the vicinity of the house, with the idea, perhaps, that they were a refinement over the crudities of
the rail fence, ditch or hedge-row. Colonel Fitzhugh, in letters written
during the latter part of the seventeenth century, mentions his garden
particularly as being "pailed in." Unquestionably no old garden was
without its enclosure, and "so instinctive was the impulse to set apart,
that inside the main defence which shut out the rest of the world, sec­
ondary divisions were again divided, and these in turn outlined. Thus
from the palisade and rail fence down to the fragrant, stubby little ed­
ging of sheared thyme or lavender, there is a well defined line of des­
cent." (1)

The first gardens of the settlers were undoubtedly crude affairs,
serving the severely utilitarian purpose of supplying the master of the
plantation with a variety of vegetables for his tables as well as med­
icines in the form of herbs for his use against disease. An act in 1624
was established requiring the settlers to plant gardens as a provision
against famine. And now, what did some of the Colonial gardens contain?

Parkinson's Paradise, published in England in 1629, which probably
exerted an influence on our early gardens, gives us an indication of
some of the more practical uses of plant materials, with instructions in
garden planning:

"Lavendula -- Lavender is little used in inward physic, but out­
wardly the oyle for cold and benumbed parts, and is almost wholly
spent with us, for to perfume linen, apparel, gloves, leather, etc.,
and the dyed flowers to comfort and dry the moisture of a cold brain.
"Basil -- The physical properties are to procure a cheerful and
merry heart, whereunto the seed is chiefly used in powder.
"Marjoram -- To ease pains, and put into Antidotes, as a remedy
against the poison of venomous beasts.
"Thyme -- Oyle used in pills for the head and stomach. It is also
much used for toothache.
"Hyssop -- In pectoral medicines, to cut phlegm. For cuts and
wounds. Diseases of the spleen.
"Pennyroyal -- Good for lungs, to comfort the stomach and stay
vomiting, in baths to comfort the sinews.
"Sage -- Gargles and mouth washes.
"Mint -- Applied with salt is a good help for the biting of a mad
dogg.
"Tansy -- For weak reins and kidneys. For worms in children.
"Burnet -- Put a few leaves in a cup with Claret ... is account­
ed to make the heart merry. Also used in vulnerary drinks and to stay
 fluxes and bleedings. In contagious and pestilential agues.
"Your knots or beds being prepared fitly, as before is declared,
you may place and order your roots therein thus; Either many roots of
one kind set together in a round or cluster, or long ways cross a bed
one by another, whereby the beauty of many flowers of one kind being
together, may make a fair show well pleasing to many; Or else you may
plant one or two in a place dispersedly over the whole knot, as your
store will suffice you or your knot permit! Or you may also mingle
those in their planting many divers sorts together, that they may give

(1) Tabor, Grace: Old-Fashioned Gardening, A History and a Reconstruction. Robert M. McBride & Co.,
the more glorious show when they are in flower."

Another early book on gardening, Randolph's *Treatise on Gardening*, recommends the following materials for the vegetable garden: Artichokes, asparagus, kidney beans, cabbage, broccoli, cauliflower, celery, parsley, cucumber, currants (red and white), chamomile, celandine (annual), *ground ivy*, *hederas terestris*, horse radish, honeysuckles, hysop, lavender, lettuce, marjoram, *althea-marshmallow*, mint, melon (cantaloupe), mullein, parsnips, peas, raspberry, rosemary (*rosmarinus*), and strawberry (in beds with alleys two feet wide).

In spite of Beverley's remark made as late as 1705, "They haven't many fine gardens in that country fit to bear the name of gardens," the influence of the Mother Country ultimately proved itself in the magnificent garden developments of the colonial capital at Williamsburg, which recently have been restored so ably as a living memorial to our pioneers.
SIGNS AND LABELS FOR NATURE TRAILS

By William H. Carr, Director,
Bear Mountain Trailside Museum,
Palisades Interstate Park,
Bear Mountain, New York.

The Bear Mountain nature trails were established in 1927. Thousands of various types of out-of-door signs and labels have been placed along two miles of trails since the inception of the undertaking. Constant experimentation has been necessary to permit the development of ways and means of preparing signs for many purposes.

Numerous inquiries have been received regarding, 1) physical methods of constructing frames; 2) lettering; 3) painting; 4) general design of labels, and 5) materials used. This brief outline of instruction concerns (a) the construction of nature trail labels in summer camps and (b) the building of more or less permanent nature trail signs in parks.

We have used the following types of signs in building camp trails:

Paper and Linen Tags: We have secured tags made both of linen and of the so-called "Fiber Waterproof" or "Oak Tag." Materials of this nature may be secured from any reliable tag manufacturing firm. We have found that the best dimension is 4-1/4 x 2-1/8". This size presents nine square inches of label space. The tags may be affixed to stakes, trees, or to out-of-door objects by means of either wire or string. India ink may be used for lettering, or a typewriter may be employed. A good grade of outdoor varnish will preserve these labels for a long time. We have always believed that it is well to vary the majority of camp trail labels from year to year; therefore a sign that will be well preserved for several months is quite satisfactory.

Burned Letter Labels: Attractive wooden signs, either of cross-sectioned cedar, Typical Trailside Signs
At Bear Mountain.
flat board surfaces, or other wooden types, may be constructed by burning the letters either with a pyrography set, or with the new electric needles obtainable at hardware stores. Scratch in letters with a sharp instrument before burning. In regions where vandalism is not a problem, these picturesque signs are certainly desirable.

**Illustrated Labels:** It is possible to use colored post card flower pictures along a nature trail, especially in connection with flowering plants that have "gone by" as far as the flower is concerned. It is often desirable to use bird pictures similar to those issued by the National Audubon Society. These colored pictures may be fastened to board or composition board surfaces with glue, covered with heavy spar varnish or with bakelite spray, and then further protected by a wooden molding tacked completely around the edge. We have found, however, that some of the colors fade or change perceptibly in spite of varnishing. Otherwise they stand the weather for one or two years.

**Typewritten labels:** Where labels are to be changed frequently and the typewriter comes into play, it has sometimes been found desirable to use a fairly stiff grade of linen typewriter paper or light cover stock. An ordinary typewriter ribbon may be used. The paper may then be affixed to a composition board backing and well covered with spar varnish to prevent moisture damage to the typing.

**Art Labels:** Some nature counselors desire to illustrate lettered labels by means of India ink drawings. This may be accomplished either upon cloth or upon paper or wooden signs. Oil paints also may be employed provided they are well covered with spar varnish. Label diagrams are often useful. It always should be borne in mind that the natural object holds principal interest. The label serves the function of interpreting, identifying and explaining. Labels are but mechanical means to educational ends and, in no case, should a nature trail be considered an "art gallery" wherein natural science is concerned.

It seems advisable to design semi-permanent, descriptive labels for city and state park trails. The following methods have been used successfully at Bear Mountain:

1. **Metal label on wooden frame.**

   **Construction:** (1) Make frames of 3/4" x 1" chestnut or any hard, durable wood. (2) Cut sheet metal to fit and nail to frames. (3) Drill two small holes through metal and wood about one inch apart at top and bottom of each label for wiring to stakes.

   **Etching the sheet metal:** Galvanized sheet metal must be "etched" with acid to prepare it for paint. (Otherwise the paint is apt to peel in a short time.) Sheet zinc does not require etching. However, we prefer galvanized metal, for it is harder. Here are two methods of etching galvanized sheet metal: Before employing either method, roughen the metal by rubbing with emery cloth.
1. **Vinegar**: (a) Paint or wash the metal faces of the labels with vinegar, making certain that the entire area is well covered. (b) Allow to dry thoroughly. (c) Wash in water and dry again.

2. **Copper sulphate** (blue vitriol). (Poisonous). (a) Dissolve 3/4 pound of copper sulphate crystals in one gallon of water; (b) Add 3 liquid ounces of clear household ammonia; (c) Paint metal faces of labels with this preparation and allow to dry; (d) Remove the black material, now covering the metal, with a stiff brush and water; (e) When dry, wash with benzine and dry again.

**Painting**: (1) **Priming coat**: Use a good galvanized metal primer as a first coat. This provides a better bond with the metal than ordinary paint. Use a small amount of paint and "brush it out". This helps to prevent peeling and blistering; (2) Second and third coats: These two coats should be, of course, of whatever color has been decided upon for the labels. The main requirement is that a good, flat paint should be used. This is the most satisfactory paint for lettering and illustrating. At the Trailside Museum our trail labels are of three colors: green for botany, brown for geology, and white for zoology. The great majority of our labels are green and we have always tried to get a shade of green that will blend with the color of the leaves as much as possible, in order to make the labels inconspicuous and thus preserving the beauty of the trail.

**Lettering and illustrating**: (1) **India Ink**: We consider this the best material for lettering as it can be used with ordinary lettering pens. A No. 1 (very soft) pencil should be used to draw in guide lines and preliminary lettering. If the paint is not flat enough and the ink "draws" or does not "take", one of the following remedies will usually aid: (a) First try washing the label face with water and drying. (b) If the trouble persists, wash with vinegar, or turpentine, and dry. (c) For stubborn cases, wash with a fairly strong solution of "Clorox", and dry.

**Oil paints**: If so desired, any oil paint may be used for lettering or illustrating. Allow several days for drying when using artists' oils.

3. **Water colors**: Ordinary water colors or show card colors also may be employed and are especially suitable for illustrating.

4. **Printer's ink**: It has been found practicable to use printer's ink for the purpose of transferring imprints of leaves to labels. This may be done by coating a soft rubber roller with a small amount of ink and then inking the leaf evenly. Place the leaf, inked side down, upon the label, cover with a sheet of paper, and rub. The imprint of the leaf will be inked upon the label. It is well to experiment upon newspaper first.

**Varnishing**: First erase pencil lines with art gum. The faces, and at least the edges of the labels, should then be given two or three
coats of a good grade of spar or exterior varnish in order to preserve their appearance. We have found that varnish with a high bakelite content is most satisfactory. Rub the labels lightly with a cloth dampened with turpentine between coats to prevent "drawing". After being placed upon the trail, they should be revarnished from time to time, according to their locations: if exposed directly to the sun, about every two months; if located in the shade, about every six months. Frequent varnishing is especially necessary if water colors have been used.

Label posts and wiring: With one or two exceptions, our nature trail labels are wired to stakes driven into the ground in front of the objects described rather than to the trees themselves. We have always been fortunate enough to obtain sufficient saplings averaging 1-1/2" in diameter to supply our needs from various sections of park land which were being cleared for one purpose or another. In this way we have not had to destroy young trees to obtain our label posts. We have found that cedar and locust make the most enduring stakes, although, in southern states we recommend the use of metal posts to prevent termite damage. Posts should be well-seasoned after cutting. Shave the bark from the section of stake which is to go into the ground and point the end. The shaved section should be treated in a hot creosote bath for best results.

Method No. 1 for wiring label to stake: Use a No. 14 gauge, soft galvanized strand wire. Bend short lengths of this wire into U shapes. Draw the two ends of a bent wire through the pair of holes drilled at the top of the label. Repeat for the holes at the bottom of the label. Place the label against the stake so that each pair of wires straddles the stake. Then pull tight and twist the ends together with pliers. Cut off the surplus wire at an angle --- thus producing a sharp point that will discourage those attempting to tamper with the wire. The above method is fairly satisfactory but when the wire becomes loose, the label may be turned on the stake or lifted off entirely. This may be prevented by using the following, more complicated method:

Method No. 2 for wiring labels to stakes: Wire the bottom of the label to the stake as in Method No. 1. Then drill a 3/16" hole through the stake just above the top of the label. Put the wire through the top pair of holes and around the stake as in Method No. 1 but do not twist the ends. Bring them back through the hole prepared in the stake --- pull tight --- wrap around to the back of the stake again, and then twist the ends together and cut.

II. All-metal labels

Follow the above directions, omitting the wooden frames. It is not advisable to use plain metal labels where there is any chance of vandalism as they are easily bent. Many uses may be found for very small all-metal labels fastened on stakes and bearing numbers only. These are prepared in the same way as the larger labels, the wooden frame being omitted. A good size is 2" x 2", or they may be cut in the silhouette of an acorn or a leaf. These numbered labels may be used in many ways, and especially in the following: Along "test" trails or on trails where inconspicuous labels are desired. Mimeographed sheets may be prepared as
a key to the numbered labels. For concentration gardens where many labels are required for a small area, a large "key label" may be placed upon a board at the front of the garden. A garden labeled in this way also may be used as a means of testing science or botany students.

III. Wall-board labels

A hard-finish, dense type of wall-board may be sawed to the proper sizes and used with or without wooden frames. Paint with two coats of flat paint, front and back — letter and varnish. A sample of the wall-board should be tested for resistance to exposure before proceeding. As in the case of No. II, this type of label cannot be used where vandalism is present.

IV. Paper signs

Cover stock or bristol board may be lettered or typewritten, given two or three coats of varnish, and used as follows: (A) Stake labels. Tack the lettered and varnished paper to a light wooden frame which has been fastened to a wooden stake. (B) Out-of-door bulletin board material: Tack the paper labels directly to the board or, better still, to a piece of shellacked and varnished wall-board which has been cut to fit the bulletin board. This permits the removal of the entire display without damaging the labels. Paper buckling may be noticed when using this type of label. This may be remedied in part by nailing a light wooden molding about the edges of each label. The most satisfactory method is to glue the label to the wall-board before either is varnished. Next, nail on the molding and then shellac the exposed surface of the wall-board. Finally, give the entire display, labels and all, at least two coats of spar varnish. Photographs, reproductions of photographs, paintings, or drawings, may be used with very good effect.

NOTE: We have been advised by the research departments of various paint companies to try the following method of preparing our metal labels: (a) Wash metal surface with vinegar and allow to dry. (b) Paint with one or two coats of the new type, "bakelite" or rubber-base automobile enamel. (c) Letter and illustrate with the same type enamel in another color, using a brush.

This seems to be the most durable system for label work. Varnish, the weak link in our method, is eliminated entirely. This new, weather-resisting enamel has been used satisfactorily to refinish automobiles. This method would, however, require the use of a brush for lettering, -- a more painstaking operation than lettering with pens and India ink. Considering the number of damaged signs that must be replaced and the new labels that must be prepared each year as trails are developed, we prefer to use the faster, simpler method of lettering with India ink upon flat paint.
BELLES-LETTRES

We are able this month to make a tentative final report on the results of wearying if not exhaustive researches into a lexicographical problem which challenged our every resource. The study had its immediate origins a few weeks ago but the true root of the matter no doubt remains to be found in the mists of rhetorical antiquity when inventive pedagogues first began to talk about that elusive trinity of the written word: Unity, Coherence and Emphasis.

It came about because of recurrent letters in the office "day book" which get under way like this: "We wish to acknowledge receipt of your letter of even date..." The phrase carried a splendid ring of authority about it and each of the letters apparently disposed satisfactorily of whatever vexatious problem had come up. It was the element of mystery, however, that lifted the communications out of the drab workaday groove and upward to those shining epistolic heights which the writer of official mail may attain only when, after passing that unnamed Alpine village, he repeats, ten thousand times ten thousand, that thumaturgic refrain "Excelsior!"

Concealing, their glossological shame under a bushel, our faithful agents combed the office, leaving no stone unlearned, and interviewed a total of (this is the truth) 17 persons. They reported that:

1). No one admitted personally writing of even date;
2). No one was positive what it means;
3). Webster is inconclusive, and
4). A half-dozen English translations were suggested.

Confronted by that tangle of linguistic circumstances, The Review, ever ready to lend a hand to the bootstrap of harassed authors who seek to modernize their style, recommends as an alternative to the introductory sentence already quoted: "Your welcome favour of the 22nd inst. (or ult.) to hand and in reply beg leave to advise..."

REPEATER

A business-like compliment for Randolph A. Walker came in this month from Camping World, a leading publication of the outdoor field. Its editors praised, and asked permission to reproduce, his excellent article, "How a State Operates Organized Camps," which appeared in the December issue of The Review. Mr. Walker (Randy to friends), is Assistant State Forester in charge of the Division of Parks of the South Carolina State Forestry Commission.

MONUMENTAL

Herbert Kahler is always learning something new about Fort Marion National Monument. For the usual "Please Register" sign the Superintendent substituted: "Your registration and comments will be appreciated. As a result he is accumulating a prodigious store of source materials which, if he chose, might be put together some day as Les Mystères Inédits et Formidables du Voyageur Américain.

Running about neck and neck in frequency are the comments that (a) Fort Marion "Needs fixing up," and (b) that it "Has too much fixing up." Bedroom slippers and other symbols of fireside felicity are suggested by the concession that the monument is "Homey." Still uninterpreted, however, is the observation that the venerable outpost of Spain's New World is "Just like Brooklyn."
INSPECTORS OF REGION ONE CONFER IN RICHMOND: (Seated, left to right) John V. Larkin (N. Y.), John C. Diggs (Pa.), Harley L. Potter (N. Y. and Ohio), J. E. Bishop (Va.), J. H. Gadsby (Supervising), Robert F. Wirsching (Ala.), Daniel T. Blaney (Tenn.), George W. Nostrand (N. Y. and N. J.).

(Standing, left to right) Reginald D. Bryant (Ky.), Bailey J. Locher (Va. and W. Va.), Gerald Hyde (Mass. and R. I.), C. R. Vinton (Fla.), S. M. Woodward, Jr. (Ga.), Graham Rushton (La. and Miss.), Melvin B. Borgeson (Supervising), J. L. Duford (S. C.), Raymond M. Schenck (D. C., Md. and Va.), and Edouard N. Dube (Me., N. H. and Vt.).

C. G. Mackintosh and Donald C. Hazlett (both N. C.) do not appear in the photograph.

MINER R. TILLOTSON ENTERS ON DUTY AS REGIONAL DIRECTOR

The week of January 16-21 was marked by two events of region-wide interest: Mr. Tillotson, formerly Superintendent of Grand Canyon National Park, assumed his new duties as Regional Director on January 16, and on the same day the 20 Inspectors of the region gathered here for three days of conferences concerning Service activities. Several members of the Washington staff, the Liaison Officers, the Procurement Officers and some of the Superintendents were present at the sessions and at the dinner dance given on the evening of January 18 by the Richmond National Park Service Association as a compliment to Mr. and Mrs. Tillotson, Miss Jean Tillotson, Dr. Carl P. Russell and Mrs. Russell. Dr. Russell, formerly Regional Director and now Supervisor of Research and Information, received from the Association a photograph album and a "diploma," the latter bearing the signatures of 229 employees. A minstrel show, which revealed hitherto unsuspected talents of regional and field artists, was a roundly applauded feature of the evening.
About 250 years ago when John Bunyan finished his monumental, if a trifle overlong, Pilgrim's Progress, he confided in his Apology:

"Some said, 'John, print it;' others said, 'Not so.'
"Some said, 'It might do good;' others said, 'No.'"

When the Civilian Conservation Corps was established in 1933, Melvin Ryder and Ray Hoyt, unlike John, seized Time incontinently by the forelock and launched, that same year, the Happy Days newspaper which stands today as the dean among all publications devoted to the activities of the Corps. Unofficial and nongovernmental, Happy Days nevertheless has won a distinctive place as a skilfully edited and lively organ which has contrived to effect a neat compromise between standard newspaper technique and the special needs and interests of the hundreds of thousands of youths and war veterans who have passed through the CCC.

Happy Days always has been national in scope, however, and the individual camps soon felt a need for their own journals which, although more modest in format and circulation, could deal primarily with local affairs. Youthful editors in widely scattered camps soon marched into the breach and shouldered those onerous labors which devolve upon the publisher who is uncomfortably long on good ideas and painfully short on the physical resources required for putting them on paper. The result has been a burgeoning of camp organs that range from thin and bashful mimeographed pamphlets all the way to the expertly printed Ear Bender produced in a shop at Mt. Tom Reservation, in Massachusetts.

A study just made by Mrs. Lillian P. Sartain, of the regional office staff, reveals that at least 58 such papers are being issued regularly by CCC camps assigned to the Service in Region One. "They give an intimate glimpse of the activities of the camps," she says. "With but few exceptions the entire production is in the hands of the enrollees and they do a most creditable job, despite the inevitable handicaps which sometimes occur, such as lack of paper, mechanical trouble, shortage of editorial personnel and camp transfer... In case of camp removal the name of the paper is changed as well as most of its editorial and contributing writers but, nevertheless, following the age-old desire of man, they have a story to tell and want to tell it... Circulation depends on the man-strength of the company, although many enrollees send copies of their paper home, supplementing the news provided by personal letters."

The following list of camp publications, showing place and date of issue, is based on responses made to a questionnaire distributed from the Richmond office:

**ALABAMA**
Monte Sano Broadcast, 10 - '38; Monte Sano State Park.

**FLORIDA**
Veterans' Viewpoint, 11 - '37; Florida Caverns State Park

**Tropic Star, 10 - '38; Matheson Hammock County Park. (Previously issued as Tent Town Topics, 7-'34 to 11-'34; The Rattler, 12-'34 to 6-'35; The Wanderer, 9-'35 to 1-'38).**

**KENTUCKY**
Cromwell Cardinal, 10 - '34; Audubon Memorial S. P. The Mammoth Eagle, 7-'36; Mammoth Cave, NP-1. The Cave Man, 11-'34; Mammoth Cave, NP-2.
Mountain Laurel, 10-'35; Pine Mountain State Park.

MAINE
Sou'wester, 1934; Acadia National Park, 'P-2.

MASSACHUSETTS
Breakheart Mirror, 1936; Breakheart Reservation.
Far Bender, 4-'38; Mt. Tom Reservation.
Men-Base, 12-'36; Salisbury Beach S.P.
Tieckw Sentinel, 11-'38; Savoy State Forest.
(Was previously issued as Florida Flyer, 1-'36; Tenney Park, 4-'37; Mohawk Leader, 4-'36.

NEW HAMPSHIRE
Moose Call, 6-'36; Wolfboro State Park.

NEW JERSEY
Current Camp Capers, 1-'38;
High Point State Park.
Ft. Nonsense News, 10 - 137;
Morristown, NHP-1.
The Palisades Press, 5 - '38;
Palisades Interstate Pk.
Veterans Broadsides, 10 - 138;
Darnal State Park.
The State Parker, 8 - '38;
Voorhees State Park.

NEW YORK
The Buckhorner, 5-'38;
Buckhorn Island S. P.
Towpath, 11-'34;
Chenango Valley S.P.
Ellis Hollow Breeze, '33;
Cornell Univ. Arboretum.
(Previously issued as Iona Islander, changed 7 - '35).
The Bulletin, 10-'37;
Fair Haven Beach S.P.
The Whistle, 8-'34;
Gilbert Lake State Park.
Hanlin Special, 8-'38;
Hanlin Beach State Park.
Genesea Gazette, 10-'36;
Letchworth State Park.
Vohansic Lurum, 2-'36;
Vohansic Reservation.
Northern Light, 2-'36;
Thousand Friends S. P.
Storm King, 1936;
West Point Res. (Fed.)

NORTH CAROLINA
The Beacon, 1-'35;
Cape Hatteras State Park.
Tops, 9 - '38;
Hanging Rock State Park.

OHIO
Sand Run Partridge, 1 - '35;
Akron Metropolitan Parks.
(Previously issued as Ridge Runner, '34; Talking Parrott, '36).
Veterans News, 1 - '34;
Cleveland Metropolitan Parks.
(Previously issued as Camp Euclid Surveyor, changed 7 - '37).
Lake Erie Breeze, no date.
Cleveland Metropolitan Parks.
Jefferson Rooster, 4-'37;
Jefferson County S. P.

PENNSYLVANIA
Stillhouse Distillations, 8 - '36;
Caledonia State Park.
Hopewell Howl, 1 - '36;
French Creek Recreational Demonstration Area.
Battlefield Echo, 10-'36;
Gettysburg, H.P.
Trent Times, 1935;
Laurel Hill Recreational Demonstration Area.
Barracks Barrage, 5-'36;
Maacoom Creek Recreational Demonstration Area.

RHODE ISLAND
The Escoheagan, 11-'36;
Beach Pond State Park.

SOUTH CAROLINA
The Cherokee, 1935;
Cheraw State Park.
The Mountains, 7 - '36;
Kings Mountain Recreational Demonstration Area.

TENNESSEE
Booker T. Washington Broadcast, 4 - '34;
Shelly Nore State Park.
Big Ridge Gazette, 12-'34;
Big Ridge Park.

VERMONT
The Arthur Rumor, 9-135;
Chester A. Arthur State Forest Park.

WINOOSKI
The Traveler, 1 - '36;
Fafakok State Park.

WYOMING
The Morgan Goat, 11-'34;
Carson State Park.
Hardy Life, 11 - '34;
Lost River State Park.
Watoga Chatterbox, 9-134;
Watoga State Park.
NEW BOOKLET DESCRIBES CCC

A 47-page illustrated booklet, reproduced by multilith, has been issued by the Department to describe the origin, development and accomplishments of the Civilian Conservation Corps. The title is CCC. All the writing was done by James F. Kieley, associate recreational planner.

The booklet offers a comprehensive study of the Corps, brought up to date, and deals with activities of enrollees not only in parks but also on lands administered by other branches of the government. There are descriptions of the types of work performed and a summary of the benefits which accrue to the members themselves. Among the illustrations is a reproduction of the historic bit of memo paper on which President Roosevelt sketched the rough outline of the organization of the CCC when he first brought the idea to the attention of department heads on inauguration day, March 4, 1933.

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FONTAINEBLEAU PLANTATION HISTORY RELATED

A chronology of principal events concerning the Marigny family, once the owner of Fontainebleau Plantation which now is included in the new Tchefuncte State Park, near Mandeville, forms an interesting part of an article by N. E. Simoneaux, Secretary of the Louisiana State Parks Commission. The materials are being published serially by Louisiana Conservation Review.

A great deal of misinformation relating to the Marigny family has gained currency in recent years, Mr. Simoneaux points out, and, in view of the widespread interest in the subject which has been stimulated by the development of Tchefuncte, proceeds to offer an abundance of carefully verified details concerning the establishment of the household in Louisiana. François Philippe de Mandeville, Sieur de Marigny, a Norman, reached the colony in 1700, and his descendants are traced, in the writer's first installment, to the end of the century. A later installment will continue the family chronology and there also will be a discussion of the work already accomplished at Tchefuncte State Park and of the development contemplated there.

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MUSKRAT RECIPE

James Nelson Gowanloch, state biologist, also writing in the current Louisiana Conservation Review, presents a recipe for muskrats which, he promises, will make your guests "demand second and third helpings." His culinary instructions, which include a bit of post mortem surgery, are:

"Muskrats are cleaned, the /two musk/ glands removed and the carcasses disjointed. A pot is half filled with cold water to which is added as seasoning, one tablespoonful of salt, one pinch of soda, one teaspoonful
of sugar, pepper to taste, and the water is brought to a boil. The prepared muskrats are then added and left in this seasoned fluid until the whole mixture again begins to boil. They are then strained in a collyendar, rolled in seasoned flour and fried brown. A brown gravy may be prepared since it adds excellently to the taste of the whole dish. Many people also enjoy the substitution of a typical Italian tomato gravy for the brown gravy, but this, in the writer's opinion, tends to mask too much the special flavor of the game."

Dr. Gowanloch deplores the manner in which the "marsh hare" has been slandered because of its unfortunate name and consequent association with house rats. Muskrats, he point out, are far more closely related to rabbits and squirrels.

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FORESTRY BOOKLET FOR STUDENT READERS

Our Nation's Forests, by Rosalie Edge; introduction by Harold L. Ickes, Secretary of the Interior. New York Emergency Conservation Committee Publication No. 73, Conservation Unit VI. 1938.

Reviewed by Fred H. Arnold, Regional Forester

The keynote of this 25-page pamphlet perhaps is best expressed in the statement quoted in Secretary Ickes' introduction: "I planted the seed." Viable seeds of constructive conservation thought are stored in its pages, awaiting reception and abundant germination in the fertile mind medium of America's youth -- conservation's hope for tomorrow. Says Mr. Ickes further, "The surest way to save what is left of our forests, and restore, through replanting, what we need for the future, is to let the young people of America know about the problem. If they know how the United States has mistreated its forests, and what the forests mean to the country in the welfare and happiness of the people, they will do their part to remedy this evil when they grow up and take part in public affairs."

The pamphlet is an introduction to forest conservation. In it are reviewed briefly: the past history of America's forests; our dependence upon their tangible and intangible products and influences; some of the more destructive enemies of the forests; and some of the policies principles and practices that the author believes desirable in a national forestry program. A few illustrations are used to supplement the text. The closing pages are devoted to a series of lesson questions for both younger and more advanced students, and to a list of general references.

In dealing with the menace of forest fires, the publication points out that "Four-fifths of the forest fires might have been prevented." This true statement stands as a challenge to a nation which is proud of its progress in conservation. Until this challenge is successfully met and the evil permanently overcome no substantial advancement in conservation can be made. Our Nation's Forests is a constructive contribution to the cause of conservation. We hope that the youth of America will not only read but study it.
A MILESTONE IN HISTORICAL CONSERVATION


Reviewed by Roy Edgar Appleman

This publication, with a preface by Harold L. Ickes, Secretary of the Interior, and an appendix comprising a series of charts illustrating the administrative organization in European countries charged with caring for government-owned historic sites, archeologic sites, buildings and various antiquities, is the first and only thing of its kind published in the United States covering the legislative and administrative basis for a national policy of historical conservation.

Mr. Schneider's report is the result of a study made during 1934 of activities, private and governmental, in this country and in Belgium, England, France, Sweden, Germany and Italy on the subject of historical conservation. It is divided into three parts; Part I reviews federal, state, local and private activities in the United States; Part II discusses the legislative history and administrative organization for the preservation of historic sites in European countries; Part III is concerned with the historic sites legislation of 1935, which was drafted as a result of Mr. Schneider's study and with recommendations for a national program of historical conservation in the United States.

This publication, although in a limited edition, marks a milestone in the movement for the preservation of antiquities in this country and discloses the vast amount of study and consideration of precedents, here and abroad, on which the Historic Sites Act of August, 1935, is based, and a national long-range program inaugurated in this field.

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"OCCASIONAL FORESTRY NOTES"

The first issue of Occasional Forestry Notes is being distributed in Region One this month by the Branch of Forestry, launching a series of nonadministrative, technical papers designed for use by "key men in forestry and protection work" within the Service. Note No. 1, of eight multilithed pages, is a report on the advanced fire control section of the Feather River Training School of the United States Forest Service, last October 31-November 12.

"All Occasional Forestry Notes," said Forester J. F. Shanklin, in a letter to the Regional Office, "Will be predicated on the assumption that the material will serve a useful purpose in forwarding the policies and objectives in forest protection and forest use within the national parks and monuments and is applicable to the country as a whole or should be known by the key protection men within the Service."
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PARTNER REQUESTED FOR 'MISS LIBERTY'

The President recently transmitted to the Service a letter received at the White House from a woman resident of the Pacific Coast who suggests the establishment of an additional National Monument for administration by federal park forces. It reads:

"My dear Sir:

"An idea has come to me regarding the statue of Liberty in New York Harbor, on the Atlantic coast. Since we have this Goddess of Liberty, why should we not have a God of Liberty on the Pacific coast— and preferably on the San Francisco Bay? It would be complete then for our country would have both a God and Goddess of Liberty! As it is now the Goddess must be very lonely for it takes the qualities of woman, representing love, and man, representing intelligence, to make a complete idea—although both man and woman have love and intelligence in each individual idea. If you think well of this idea would you kindly advise me, even though no country has offered to furnish the statue?

"Yours for real liberty,

"—

* * * *

122,123 VISIT MAMMOTH CAVE NATIONAL PARK IN 1938

A total of 122,123 persons were checked by rangers at Mammoth Cave National Park during the calendar year just ended. More than 83,000 entered the cave. All states and 29 foreign countries were represented among the visitors. The order of leading states was Illinois, Kentucky, Ohio, Indiana, Michigan, Wisconsin and Pennsylvania.

EARL HOOVER, formerly an assistant wildlife technician assigned to the Springfield office of the Service, died January 8. He entered the Service in the spring of 1935 but resigned the next year to accept appointment by the State of New Hampshire as biologist charged with conducting far reaching fish and game studies.

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CORRECTION: In its December issue The Review probably conveyed the impression, on page 26, that the National Camping Advisory Committee, headed by Fay Welch, lecturer at the New York State College of Forestry, is an organization outside the Service. It now is pointed out that the advisory committees on camping, hiking and skiing were formed by the Service and their members designated by Secretary Ickes. Their work is concerned with all of the activities of the Service and is not confined to Recreational Demonstration Areas.
REGION ONE TO RECEIVE FIRST OF NEW UNIFORMS

The 12 states embraced by the First, Second and Third Corps Areas, all of them within Region One, will receive the first issues of the new spruce green uniform approved this month by Robert Fechner, CCC director. The supply will become available October 1 for camps in the six New England states and in New York, New Jersey, Pennsylvania, Delaware, Maryland and Virginia. Enrollees of all other Corps Areas will continue to wear the present olive drab until current clothing stocks are exhausted.

The new regulation uniform will include a coat, trousers, mackinaw, overseas cap, woolen olive drab shirts, black neckties and black shoes. Coat and mackinaw will be of patch-pocket, back belted style bearing, on the left shoulder, the CCC insignia—green on a yellow ground. The insignia also will be worn on the caps.

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TYPICAL ENROLLEE IS 5 FEET 8, WEIGHS 142

A recent study of the total of nearly 60,000 youths who enrolled in the Corps during the fall replacement period shows that the typical member was 18½ years old, 5 feet 8 inches tall and weighed 142. "He had completed eight years of public school," said the report, "and had had little or no previous employment since leaving school. He had five dependents and made a monthly allotment of about $23.50 out of his $30 cash allowance to aid in the support of these five dependents.....Of the 58,954 youths accepted . . . nearly half had never previously had any regular job . . ."

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AMERICAN ATHLETIC UNION LIFTS RESTRICTION

The American Athletic Union has amended its by-laws to permit CCC enrollees to participate without registration in the events conducted under its auspices. The provision is similar to that made for members of the Army. It is expected to be helpful in the promotion of CCC athletic activities.
THE CONTRIBUTORS

ROY EDGAR APPLEMAN'S editorial work and book review in this issue are not his first contributions to The Review. (Vol. I, No. 3 pp. 14-20, and inside back cover).

WILLIAM HENRY CARR, director since 1926 of the Bear Mountain Nature Trails and Trailside Museum, is an assistant curator of the American Museum of Natural History. For the last seven years he has been chief naturalist of Palisades Interstate Park and he formerly was editor of The Camp Naturalist Magazine. He was born 37 years ago on Long Island.

LOUIS FRIEDLANDER had his first appointment as a student technician in the summer of 1937 and was assigned to research at Hopewell Village, in French Creek Recreational Demonstration Area, Pennsylvania. Last summer he was engaged in studies relating to Ocmulgee National Monument, Georgia. Holding degrees from the College of the City of New York and Columbia University, he now is a candidate for a doctorate from the latter institution. He was born in New York City in 1913.

ARTHUR RANDOLPH KELLY, born 38 years ago in Hubbard City, Texas, was assigned by the Smithsonian Institution as archeologist-in-charge when explorations first were begun at Ocmulgee fields, near Macon, in 1933. He entered the Service in May, 1937, as CCC project superintendent, received a Civil Service appointment a few months later as associate archeologist. He now is chief of the Division of Archeologic Sites of the Branch of Historic Sites. He holds degrees from the University of Texas and from Harvard and has taught at those two institutions and at the University of Illinois.

HARRY STEPHEN LADD entered the Service in 1935 as associate geologist. Born in St. Louis on the first day of the last year of last century, he is an alumnus of Washington University and holds two higher degrees from Iowa. He taught geology at Iowa and at Virginia and was a research associate at Rochester. His work has taken him for long periods to South America and to the South Seas.

VIVIAN ROSWELL LUDGATE already has contributed articles on the Statue of Liberty and Mount Katahdin. (Vol. I, Nos. 2 and 3, 15 ff. and p. 3 ff. and inside back cover).