

scheduled school visits, and attracted out-of-town visitors. This promising start faltered when the PWA funds for the museum finally ran out. After only four months Hudson had to be transferred to funding for a park museum project. He divided his attention to some extent between his old and new assignments to keep the Interior Museum functioning.³⁴

The museum ceased to be a responsibility of the Museum Division or the Park Service on April 1, 1939. Secretary Ickes reassigned its operation to his office and made Harry Raul the curator. Although Raul lacked curatorial training or experience, the absence of adequate funding probably bore equal blame for what ensued. Interior's bureaus, chronically hard-pressed for program support, failed to provide money to keep their exhibits up-to-date. The exhibits were of high quality and durability, but much of their content soon lost relevance. The Interior Museum entered a long period of stagnation.

Eastern Park Museum Projects to 1942

The PWA museum projects for eastern parks came to a standstill when the money ran out at the end of July 1935. Six months of uncertainty followed before the efforts of Associate Director Demaray succeeded in securing a new allotment. This hiatus did not lessen Carl Russell's commitment to the program nor persuade him to lower his standards. In late August he started out to survey museum needs at Acadia National Park, but Ansel Hall's unexpected arrival in Washington cut short the trip. Hall came eager to justify a large WPA project, a scheme Russell considered "half-baked" because the low salaries would not provide employees adequately skilled to prepare exhibits of the quality he envisioned. They discussed the proposal for a museum division in Washington, as yet unapproved, which Hall appeared to accept.³⁵ In October Russell moved his family from Berkeley to Washington in anticipation of the division's establishment, which came in December.

Authorization of PWA funding for what seemed at least another year came in mid-January 1936. The Museum Division received \$126,500. Eastern projects got \$73,500 and the West \$53,000. Russell proposed spending less than half the eastern share on the museums in the newly constructed PWA buildings. He did not expect to complete all of them but hoped to make them functional. Hot Springs, with an administration/museum building in the 1935-36 PWA program, would soon require exhibit funds. At Fort McHenry the temporary installation of the Bowie arms collection required replacement, and Colonial National Monument was in the midst of local museum development that needed more professional support. Most of the remaining money was earmarked for smaller projects at Antietam, George Washington Birthplace, and Mammoth Cave. Russell

included a larger sum for museum planning at Acadia, a new project for which no building had yet been programmed.³⁶

Even this injection of money did not assure stability. On the same day as the PWA authorization, Russell had to confer with Conrad Wirth about how many positions the museum program might lose from a threatened curtailment of ECW funds. In March continuance of the Fort Hunt laboratory and Hall's vital ECW staff demanded strong justification in the face of the anticipated cuts. In May it was PWA money that seemed shaky, and Russell appealed to Wirth for help against the prospect of "total failure of PWA support to be suffered by the Museum Division in July."³⁷ Such recurrent crises, even though usually averted, entailed disturbing shifts in personnel that would plague the division until World War II brought an end to the Depression-generated emergency programs on which it largely depended.

Under the circumstances the division reluctantly undertook peripheral projects to bring in extra funds. These included exhibits for numerous conferences and expositions ordinarily assigned to the Fort Hunt laboratory or to Berkeley. The division lent the services of Alden Stevens for a month on a reimbursable basis to coordinate exhibits at the 1936 Wildlife Conference. John Ewers apparently served in a similar capacity for CCC exhibits at the Texas Centennial Exposition in Dallas. A source of extra money closer to Russell's interests came from Wirth's state park program. ECW development of state parks, a Park Service function at the time, involved establishing museums in parks where these seemed appropriate. Wirth turned to the Museum Division for exhibit planning and preparation and occasionally for special curatorial services, work that the laboratories welcomed.

The immediate concern in January 1936, however, was to reactivate the PWA program. Action proceeded on two fronts. At Morristown Burns found it possible to assign the preparation of illustrations, models, and labels for the Vicksburg museum along with work on the Interior Museum exhibits. The presence of John Ewers, who was familiar with both sets of plans, as curator made it practicable to combine the jobs. In Washington, where the curatorial staff drafting plans for the Interior project had largely dispersed, Russell set up a small planning and preparation unit in the Bond Building at 14th Street and New York Avenue northwest, where the Branch of Plans and Design occupied rented space. Kenneth Disher supervised the operation although working much of his time in the division office at Interior.

For most of its existence the Bond Building group consisted of two artists and a curator. The artists, hired locally, did not match in skill those Burns was assembling at Morristown but produced usable work. Both had emigrated from Europe after World War I. Marcel Colin, a dapper

Frenchman who had been a teenager when the war ended, clashed ideologically with Frank Imrey, a veteran of the Austro-Hungarian Imperial Army. Imrey brought a background of colorful adventure, having been captured by the Russians and escaped across Siberia and China. This may have helped to make his preliminary sketches lively and convincing, characteristics that eluded the finished illustrations. He worked particularly on exhibits for the Hot Springs museum. Ralph Lewis collaborated with them as curator for a few months, continuing preparation of the Hot Springs exhibit plan and one for the Interior Museum alcove assigned to Territories and Island Possessions. When Burns moved his laboratory to the Ford's Theatre building, it absorbed the Bond Building unit. Imrey remained with the laboratory for a time while Colin was sent to help with exhibit preparation at Colonial.

Carl Russell did not carry through the opportunities provided by the new PWA allotment. His primary focus on museum work came to an end following a tragic event on February 25, 1936: George M. Wright, chief of the Service's Wildlife Division, and Roger W. Toll, superintendent of Yellowstone, died in a traffic accident while traveling together on official business in New Mexico. Wright had been assistant park naturalist at Yosemite under Russell, and the two men remained close friends. When Wright proposed a program of wildlife research in the parks as a basis for better management, Russell supported him strongly and argued his cause in Washington. Finally the Service established a wildlife division in the director's office with Wright in charge. Russell's early association with its program and his doctorate based on park wildlife research made him a natural choice to carry on the work after Wright's death.

Russell recommended Fritioff Fryxell to succeed him when he took over the Wildlife Division on August 16. When Fryxell proved unavailable, Ned Burns became head of the Park Service museum program, a position he would hold with distinction for the rest of his life. Because Burns lacked civil service status, his title was acting chief of the Museum Division until the position became permanent in 1939.³⁸

The change of command did not lessen Russell's professional interest in museums. While his transfer to the Wildlife Division was in progress, the Carl Schurz Memorial Foundation selected him for a three-month study tour of European museums. Characteristically he brought home stacks of museum publications, which he carefully organized, filed, and made accessible to Park Service museum staff. He picked up his wildlife functions as soon as the tour ended, but another contingency gave him less than a year in the post. On August 1, 1937, the Service regionalized its operations, and he moved to Richmond, Virginia, to direct Region One, covering parks in the eastern states. Little more than a year later Harold Bryant became superintendent of Grand Canyon National Park, and Russell

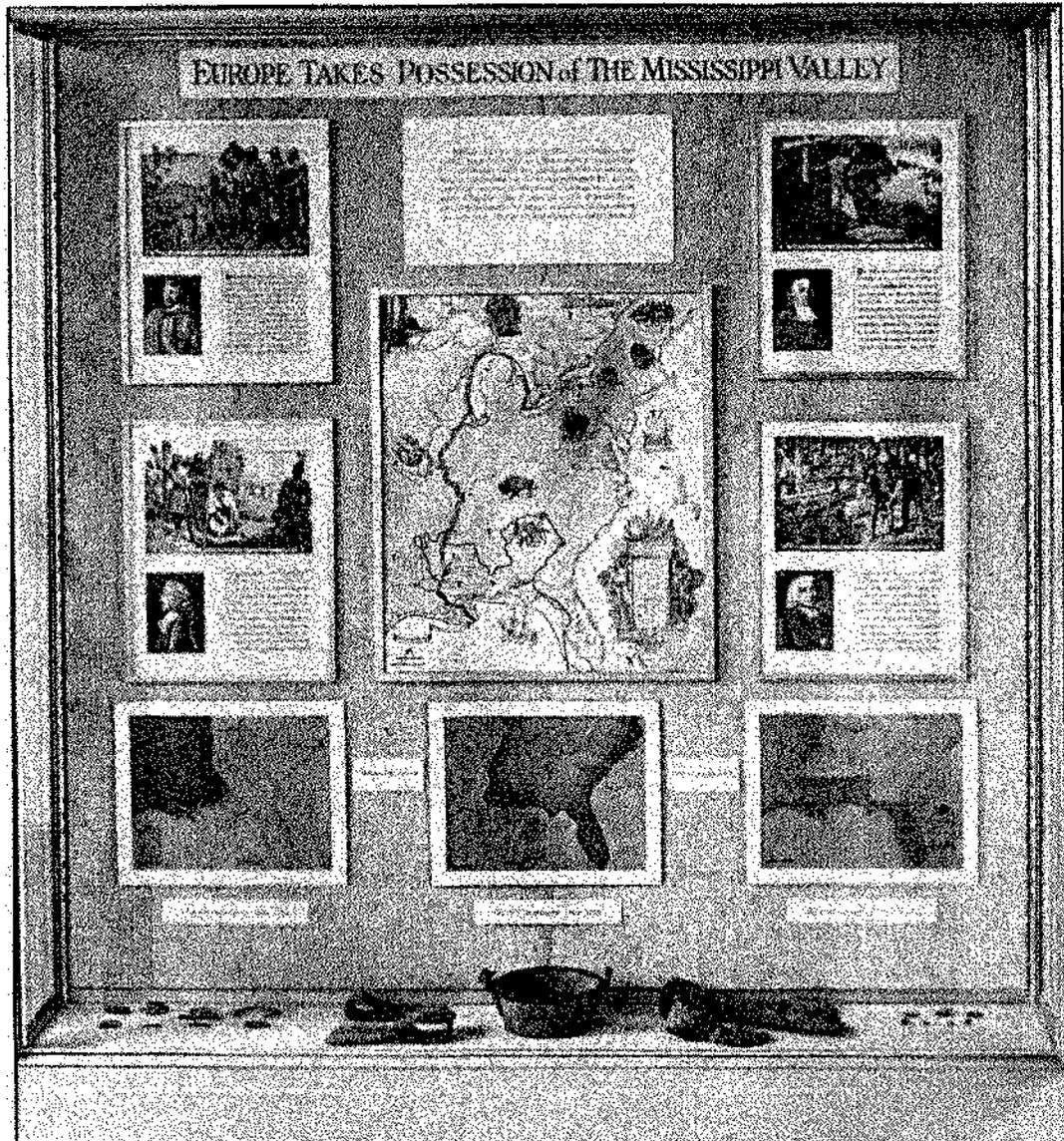
returned to Washington to succeed him as supervisor of research and information. Overseeing the Museum, Naturalist, and Wildlife divisions, he gave strong support to the museum program without circumscribing Burns, who had earned his full confidence.³⁹

Burns faced many of the difficulties as Museum Division chief that Russell had before him. Bryant, his initial supervisor, was still restrained in his advocacy of park museums. Chief Naturalist Trager's generally critical and uncooperative stance toward the museum program probably became more so when creation of the Museum Division took away his control of the Fort Hunt laboratory. Verne Chatelain took the educational aspects of the historical parks with him when he succeeded in having historical activities removed from the Branch of Research and Education to a separate and equal Branch of Historic Sites and Buildings. Consequently the Museum Division continued to have two masters who did not see eye to eye, both now assistant directors. Although Chatelain resigned in 1936, the interbranch relationships changed little under his acting successor, Branch Spalding. Within the division Burns inherited the problem of supervising to a degree his distant and unwilling colleague, Ansel Hall, whose budget and program fell within his purview.

A series of personnel changes soon placed the Museum Division in a much more cooperative environment. Early in 1937 Hall decided to leave Park Service employment and assume management of the principal concession at Mesa Verde. His successor was Dorr Yeager, who had worked closely with Russell on museums at Yellowstone and Rocky Mountain and had moved into Russell's position on Hall's Berkeley staff. Yeager's new title, assistant chief of the Museum Division, and the subsequent renaming of the Field Division of Education as the Western Museum Laboratories signaled the warm collaboration that ensued. Russell's transfer and promotion in 1938 to head the Branch of Research and Information assured museums strong support on the director's staff. Earlier that year Ronald F. Lee became supervisor of the Historical Branch. He moved quickly to advance cooperation between his branch and Russell's, particularly in regard to museum work. As one effective means he arranged a series of round-table discussions among their staffs to address common professional concerns, such as the role of objects in historical research and interpretation. Earl Trager remained as chief of the Naturalist Division until his resignation in the summer of 1940 to become manager of Bell & Howell's Washington branch. Good cooperation between the Museum and Naturalist divisions preceded this, thanks especially to Trager's able assistant chief, Howard E. Rothrock. It continued under the new chief naturalist, John E. Doerr, Jr.

Burns did not wait for these fortuitous occurrences before pushing ahead on the PWA projects. PWA funds had provided administra-

tion/museum buildings for seven eastern parks. The ones at Chickamauga-Chattanooga, Guilford Courthouse, Shiloh, and Vicksburg as well as two more added under the 1935-36 program, Fredericksburg and Hot Springs, stood waiting for their exhibits when Burns took command. Construction of the Morristown museum, which would also house the park offices, neared completion. These incipient museums required much more exhibit preparation than the new allotment could cover. Making the best of the situation, he used the existing laboratory staffs to turn out as much good work as possible without jeopardizing progress on the Interior Museum.



Vicksburg National Military Park exhibit, 1937. A typical wall case among the first generation of exhibits planned and produced by the Museum Division.

The Vicksburg museum had its exhibits completed and installed first and opened in February 1937. Hot Springs came next, opening that June. Shiloh followed, but the available funds ran out before the job could be finished. The museum opened in March 1938 with some of the exhibits as planned and the rest temporary installations by the park staff.

Morristown dedicated its new building on Washington's Birthday in 1937 but waited a year to admit visitors to the museum on a regular basis. By then two exhibit rooms each contained a diorama prepared by the Ford's Theatre laboratory and a few choice specimens from the park collection supplemented by temporary displays. These occupied the cases for which permanent exhibits had been planned. The Morristown museum, well endowed by its exceptional building and collection, remained in this interim situation for years. A resident curator kept it viable and reasonably active.

Lack of funds prevented any work on the exhibits planned for Chickamauga-Chattanooga and Guilford Courthouse. Guilford, which got some replanning help from the Museum Division, went ahead locally to install ten temporary exhibits and open in the spring of 1937. The original PWA allotment had not included museum planning funds for Fredericksburg. In the new program the Ford's Theatre and Fort Hunt laboratories collaborated to prepare a striking diorama requested for this museum. Beyond that Superintendent Branch Spalding wanted no professional help from the Museum Division. He rejected the idea of narrative exhibits in favor of "expository" ones. He did not convey clearly the distinction he had in mind, but his staff installed cases of Civil War relics in the typical practice of local history museums.⁴⁰

While Burns could not feel satisfied that only two of the seven planned museums were fully functional, he could be pleased with the quality of workmanship in the exhibits his preparators produced. Contemporary museum practice left the overall design of an exhibit as well as its content to the curator; participation of a trained designer at the planning stage lay well in the future. Burns concerned himself with carrying out the curator's specifications effectively. He made sure that specimens showed to advantage in regard to their condition and mounting. Graphic devices were prominent in most exhibits, and he expected the laboratory artists to produce well-drawn and composed illustrations, basically representational, that expressed clearly the ideas intended. He allowed touches of humor or caricature and probably was not surprised when these occasionally offended a visitor. Maps, charts, models, and sculpture had to meet similar criteria of clarity and skillful execution. To assure the legibility and visual attractiveness of labels he relied on freehand lettering with brush or pen in which Albert McClure, for one, had special skill.

The centralization of exhibit production made such quality standards attainable. It also imposed constraints. The exhibits had to be sturdy to

withstand shipment and not too large to go through the museum doors upon arrival. They also had to be durable, for distance would make routine maintenance or repair by the preparators impractical. Burns therefore insisted on the use of high-quality materials. This involved persuading procurement officials to let him bypass federal supply schedules to buy high-grade artists' pigments and brushes, foreign-made sculptors' tools, and Whatman board.⁴¹ Burns also knew that exhibit animation in almost all its tempting forms required continual maintenance that the parks could rarely provide, so he ruled out motorized or visitor-manipulated devices. Lighting effects dependent on special care in the replacement or precise positioning of lamps were avoided for the same reason. Being made by skilled craftsmen, the exhibits required comparable skill to effect satisfactory repairs, corrections, or minor revisions. The Museum Division therefore discouraged any alteration of exhibits by impatient park staff.⁴²

These exhibits represented the state of the art for park museums before World War II. Each exhibit concerned one logical segment of a sequential park story and typically occupied a freestanding case. The case helped greatly to protect the specimens and the numerous graphic devices, often done on illustration board. General opinion held that cases enhanced the displays as well, like frames on pictures. One rarely heard complaints about the glass as a barrier to understanding or appreciation, although reflections might create problems. Park museums employed wall cases by preference, supplemented on occasion by table, aisle, or pedestal cases to meet special needs. A wall case had an enclosed base, polished plate glass front and sides framed in narrow aluminum extrusions, and a solid back of homosote, a dense composition board. The case front opened with a piano hinge along one side to provide access. Monk's cloth, a plain woven fabric, covered the back panel and floor of the case to give a neutral, buff-colored background for the exhibit elements. To avoid the disadvantages of placing lights inside a case, vertical aluminum troughs carrying tubular incandescent lamps were hinged to the frame at either side of the front. The labels, illustrations, maps, and charts executed on individual rectangles of illustration board were usually attached to the case back with gimp tacks or pins from which the heads were clipped. Specimens and models rested on the case floor or were fastened inconspicuously to the back panel.

The naivety of the curators as designers showed in the strict symmetrical layouts. Most exhibits shared a hierarchy of labels with a title at the top, a key label centered below it, often several secondary general or descriptive labels that might be incorporated in illustrations, and brief object labels. The curators had not yet learned the cardinal virtue of brevity in label writing. In the Vicksburg museum verbiage ranged from about 150 to nearly a thousand words per case. Key labels that were expected to be read by nearly every visitor seldom fell below forty words and might

approach 150. Park Service museums would later regard 25 words as a desirable maximum.

While these exhibits were in production, the PWA allotment permitted a limited amount of other museum planning by the curators paid with this money. John Sachse produced the revised plan for the Bowie Collection and plans for other Fort McHenry exhibits noted previously. Stuart Cuthbertson did preliminary studies for an abortive fur trade museum (mentioned later). Ralph Lewis concentrated on plans for museum development at Acadia that also failed to materialize. Concurrently ECW provided two student technicians during the summer of 1936 who completely revised the Guilford Courthouse exhibit plan. One of the students, Paul Hudson, was transferred to the PWA rolls at the end of the season. As a PWA employee he received a curatorial assignment atypical of the centralized museum development pattern.

George Washington Birthplace had asked for the services of a curator. As noted in Chapter One, the park faced uncharted predicaments with a nascent historic house museum in a questionably reconstructed building. At the same time an archeological project at the site was turning up many artifacts and threatening the basic premise of the museum. The Museum Division recognized the need and sent Hudson, who entered on duty as park curator in October 1936. He remained about a year, until the only available funding required his relocation to the Interior Museum project in Washington. During his tenure at the park he apparently had little chance to attack the critical curatorial problems, instead devoting much of his attention to planning and installing a temporary site museum.⁴³ Building temporary exhibits without skilled help from the preparation laboratory entailed lower display standards and weakened adherence to the priorities and procedures that underlay curatorial policies being set by Burns and his central museum staff.

Curatorial problems of comparable urgency at Colonial National Historical Park led to another atypical, decentralized situation. In this case the park selected a curator and the Museum Division provided PWA funds to pay him. Alfred F. Hopkins, M.D., had been an army doctor in the Philippines and later at the Army Medical Museum in Washington. At heart, however, Dr. Hopkins was an antiquarian and collector. After his military service he engaged in various aspects of the antiques trade, cultivating a broad knowledge of historical objects, their market values, and the practices of the business. He also polished the acquisitive skills traditionally attributed to curators. "I'll come and bring my basket," he would assure well-to-do dowagers. Hopkins worked at the Yorktown section of Colonial from March 1936 to December 1938, then accepted a similar emergency-funded position at Morristown National Historical Park.⁴⁴ While at Yorktown he prepared furnishing studies for the Moore House,

advised and perhaps supervised a WPA sewing project that reproduced Revolutionary flags and uniforms for the park, wrote an account of the weapons and equipment of early American soldiers, and proposed a solution to the puzzling markings found on many excavated clay tobacco pipes. His negotiations obtained for Colonial a sizeable gift of firearms and accessories, an example of his talent in acquiring specimens that also demonstrated the need for a park to define clearly the proper scope of its collection.

The \$73,500 of PWA money that revived the eastern park museum program early in 1936 sufficed to accomplish the limited objectives laid out for it. Along with the separately funded work on the Interior Museum it enabled the Museum Division to maintain a central professional staff in Washington for about two years, but only through the practice of strict economy. The Ford's Theatre laboratory eked out its funds by collaborating with the ECW-financed Fort Hunt laboratory to prepare museum exhibits for Fort Frederick State Park in Maryland, installed in July 1937.⁴⁵ Other savings resulted from PWA payroll reductions. Curators John Ewers and Alden Stevens and preparator Arthur Ohlman transferred to positions in the Berkeley laboratories in 1936 and 1937. Government jobs elsewhere drew off other preparators, particularly to the Interior Department Office of Exhibits established in February 1936. Secretary Ickes intended it to produce "displays and exhibits of various kinds, for expositions, conventions, fairs, and for educational purposes generally, for the Office of the Secretary, and for the several bureaus and divisions of the Department as well."⁴⁶ Fortunately for the Park Service museum program, departmental officials tacitly accepted the subtle distinction between museum exhibits and promotional displays and let the museum laboratories continue to operate. The Ford's Theatre laboratory was nevertheless reduced to six preparators by the end of March 1938: Johnson, McClure, Urban, Warthen, Wood, and Raul, the new sculptor who held a civil service appointment.⁴⁷

Another opportunity further diminished the curatorial staff. In 1937 Chauncey Hamlin secured a \$50,000 grant from the Rockefeller Foundation to establish a museum training internship program at the Buffalo Museum of Science. Two Museum Division curators promptly applied, even though their temporary status as federal employees would require them to vacate their jobs with no assurance of reinstatement. Thanks no doubt to Hamlin's interest in park museums, both were accepted in the first group of five interns. Robert Starrett and Ralph Lewis reported to the Buffalo Museum in October 1937 for a year of rigorous training under its director, Carlos Cummings. The experience covered all phases of the museum's operation and involved study trips to numerous other museums in the East and Midwest on the pattern Hermon Bumpus had prescribed earlier for Carl Russell. Hands-on practice in exhibit installation under a mentor who was hard to satisfy helped implant high standards. Many hours of observing and

associating with museum users provided an appreciation of their needs and interests impossible to acquire in the isolation of a central laboratory serving a distant clientele. At the end of the year Starrett reported to the Jefferson National Expansion Memorial in St. Louis as curator while Lewis returned to the Museum Division in Washington.⁴⁸

Their chance for reemployment rested on a new project. When exhaustion of the \$73,500 PWA allotment and the imminent completion of the Interior Museum project threatened to end support for the eastern museum development program, Secretary Ickes's Advisory Board on National Parks, Historic Sites, Buildings, and Monuments backed a proposal to allocate to the Museum Division \$100,000 of the multimillion-dollar Depression relief funding for the Jefferson National Expansion Memorial. Ickes authorized this action in January 1938 "for the preparation of illustrative material concerning the project."⁴⁹

Substantive planning for the memorial had not progressed beyond that necessary to acquire the real estate and clear the site, and estimates indicated that these steps would take most if not all the money so far available. The staff of the incipient park understandably regarded the diversion of even this small fraction of its funding as premature. It seemed equally premature to the Museum Division from the standpoint of performing work useful to the memorial. No one had a clear idea of the form the memorial would take. Even the historical parameters of the memorial theme were undefined. The park had no space suitable for an interim museum. Nevertheless, the division grasped the lifeline and concentrated largely on this project until interrupted by World War II.

Starrett reported directly from his internship at Buffalo and remained until March 1941, when a civil service position as assistant park naturalist at Boulder Dam offered more security. At St. Louis he worked a jump ahead of the demolition crews to salvage representative objects abandoned in the 482 buildings that occupied the memorial area, most of them commercial and industrial structures dating from the late 19th century. He chose furniture, furnishings, equipment, tools, records, and other items that would illustrate the working environment and business activities of the former occupants. Marking and recording each specimen, he stored them in a small factory building on the site that the park planned to retain temporarily as a warehouse. He also collaborated with the park architects in collecting, recording, and storing significant building fragments. The salvaged materials formed the core of an unusual museum collection.

As a second direction of attack, the Ford's Theatre laboratory prepared sample exhibits to show how museum development could serve the purposes of the memorial. On the premise that an eventual museum would tell visitors the story of westward expansion, the exhibits dealt with subjects clearly significant to this broad aspect of national history. The samples also

aimed to illustrate a variety of display methods, show their interpretive effectiveness, and establish quality standards. A few were scale models of exhibits that might be constructed, but most were built to the size intended for use. Their construction required most of the time and talents of the preparators until the spring of 1941. Included were five dioramas, a mural map, a diagrammatic map display, scale models of a French colonial house and two Mississippi riverboats, a detailed model for an exhibit on the evolution of the American ax, and a working model for an animated unit. Preparing these sample exhibits required substantial curatorial support in the form of detailed studies for each new diorama, map, and model.

The Museum Division's third approach to its Jefferson National Expansion Memorial assignment consisted of drafting a museum plan. Considering that the memorial had not yet defined its goals and had barely begun a professional analysis of the history implied in its name, a plan for museum development would necessarily be tentative. On the other hand, two concrete museum proposals already on record underlined the importance of timely action before the park found itself committed to tangential interests. No sooner had the Park Service become involved in the memorial than Carl Russell saw it as an opportunity to realize his dream of a fur trade museum. The historic site at St. Louis had been home base for the Rocky Mountain fur traders, and an early fur warehouse still stood within its boundaries. His quick response in the form of a prospectus and tentative exhibit plan called for a building to contain a million cubic feet of museum space. Charles Peterson, assigned to the memorial as architect, saw it through different eyes. To him the site invited the creation of a museum of American architecture, which he lost no time in promoting.⁵⁰

The Museum Division, when it entered the arena nearly two years later, believed that the memorial would need a museum presenting a balanced interpretation of westward expansion evaluated in terms of national significance. Fur trade and architecture should have a place in it, but only to the extent their relative importance warranted. Because the museum would serve a national traveling audience, it would need to be small enough to comprehend in a single visit. The Branch of History under Ronald Lee shared these views, but the vast scope of the memorial led relentlessly to bigger plans. The Museum Division settled at this stage on the idea of a museum with a summary nucleus of some 58 exhibits supplemented by larger halls developing each major theme in more detail.

The available curators began by compiling a series of theme studies. John Ewers, who had returned from Berkeley, undertook a solid review of the role of the Indian in national expansion. Paul Hudson studied the effects of the natural environment on the westward movement. Ralph Lewis considered how agriculture fitted into the advancing frontier. Russell had already requested that Stuart Cuthbertson prepare an extensive bibliography

on the fur trade, which Ewers helped finish. By the end of 1938 Thomas Pitkin, the park's able historian, provided an outline of subject matter within the tentative scope of the memorial. With this as a guide, studies, preliminary plans, and comments flowed back and forth between the curators in Washington and Pitkin and Starrett in St. Louis. Proposals became progressively more detailed and specific, culminating in a voluminous report on the proposed museum of national expansion completed in July 1941.⁵¹ For promotional display the laboratory built a large model of the museum. It included architectural details without benefit of input from the architects, who justifiably took a dim view of it. Shipped to the park with the sample exhibits, it received scant use.

While its somewhat premature involvement with the Jefferson National Expansion Memorial largely sustained the division's eastern operations from 1938 through 1941, several other projects demanded attention. Two eastern parks received emergency relief funding for new administration/museum buildings. At Ocmulgee National Monument large-scale archeological investigations revealed that the Macon, Georgia, area had been occupied continually by humans for several thousand years. The findings justified a site museum that the park archeologists hoped might become a central repository and research center for the prehistory of the southeastern states. In June 1939 the Service sent Ewers as acting superintendent to Ocmulgee, where he spent a year laying curatorial foundations and collaborating on plans for the proposed museum. Meanwhile the museum laboratory in Washington produced a scale model of the building.⁵² Further development was postponed by the war.

Kings Mountain National Military Park, one of the areas transferred from the War Department in 1933, required a smaller facility. Exhibit preparation for this museum began in May 1940 after a three-month stint of planning. Because the preparators remaining on the Ford's Theatre laboratory staff had their hands full with the St. Louis project, the division employed three additional artists for the job. Richard A. Flesch worked at the laboratory as a diorama sculptor until November. Frank E. Buffmire and Ruth B. Degges were hired in August and continued until funds ran out the following February. Lack of space at the laboratory forced them to do their painting and modeling in an unoccupied residence at Fort Hunt, but they succeeded in nearly completing the exhibits. Delays at the park in getting electrical power to the new building postponed installation until June 1942.⁵³

One feature of these exhibits engaged the division in some extracurricular activities. Patrick Ferguson, the British commander at Kings Mountain, had invented a breechloading rifle that proved too advanced for official acceptance. Carl Russell's foresight led the Service to purchase one of these rare weapons before the Kings Mountain project developed. While the

gun was at the laboratory to be incorporated in the new exhibits, Alfred Hopkins asked permission to test-fire it. To gauge the proper powder charge he and an interested friend from the National Rifle Association staff first fired it across the width of the Ford's Theatre building. When the ball buried itself deeply in the brick of the far wall after passing through a sandbag backed with planks, they transferred their experiments from the third floor to the basement. This gave them a longer as well as safer range for firing from a bench rest at a standard target.⁵⁴ Success in these trials led to a field test intended for interpretive use. John Doerr, chief of the Natural History Division, donned a reproduced British uniform borrowed from Colonial and advanced across an open field loading and firing as he went. Still and motion pictures recorded the event in detail.

Several other parks at this time had museum projects that involved the Museum Division to some extent. The Ford's Theatre laboratory produced a set of temporary exhibits for the new Ochs Memorial, a donated observation station museum on Lookout Mountain in Chickamauga and Chattanooga National Military Park. Curators on the eastern staff started museum planning for an administration/museum building at Manassas National Battlefield Park, but the approaching war postponed any work on the exhibits. They also helped plan exhibits for a western project, the new geology/paleontology wing of the Scotts Bluff museum.⁵⁵

It looked for a moment as though the division would undertake a larger western job. Glacier National Park, which had been anticipating a major allotment of PWA museum money since the beginning of the emergency relief program, finally heard that \$150,000 would become available for an Indian museum. A model for a suitably rustic building was quickly produced and George C. Ruble, the park naturalist, arrived in Washington to discuss plans. A conference with Secretary Ickes punctured the balloon. Ickes directed that the museum be erected outside the park at Browning, Montana, on the Blackfeet Reservation.⁵⁶ The allotment went to the Bureau of Indian Affairs rather than the Park Service. In January 1941 that bureau borrowed and retained John Ewers to oversee the project. Under his directorship the Plains Indian Museum succeeded not only in its exhibits, a small part of which were prepared by the Ford's Theatre laboratory under contract, but also in active crafts and research programs. It undoubtedly broke ground for the widespread development of Native American museums a generation later.

During this period as well the division accomplished two valuable tasks beyond those for which it had received funding. One of them fulfilled a need originally voiced at the First Park Naturalists' Conference in 1929. The need had grown more critical by February 1937 when Dorr Yeager informed Ned Burns of a project he had started. At his direction Alden Stevens was drafting a museum manual. Burns replied immediately: "As

you know, Dr. Russell and I have long been concerned with the need of a museum manual for National Park Service workers. Considerable work has been done on such a manual by various ones of the Museum Division staff but pressure of more immediate problems has made it impossible to complete the work." This letter shifted responsibility to Washington, although Yeager and Stevens went ahead to assemble for use in the Western Laboratories a "Book of Museum Procedure" in loose-leaf, typewritten format containing largely technical advice culled from published sources.⁵⁷

The Park Service museum program clearly suffered from the lack of an authoritative reference that defined acceptable policies and procedures and instructed staff in the proper maintenance and operation of museums. Most park museums were too small to require the full time of a trained curator. Running the museum fell traditionally to the park naturalist or historian, who was hardly prepared to do so at a professional standard. A good manual would provide the necessary curatorial guidance to these busy interpreters. Russell and Burns continued to gather material and notes toward that end.

Sometime past the middle of the 1940 fiscal year the Museum Division secured money to publish the proposed manual—but not to prepare it. Russell and Burns had their ideas and notes but had not started to write the text. Suddenly they had a matter of weeks in which to submit the completed manuscript. With a June 30 deadline they had the Museum Division drop almost all other work. The curators, typists, and some of the preparators joined the crash program spending their workdays, evenings, and weekends writing and editing drafts, assembling and preparing illustrations, running down references, typing, and retyping. Burns, whose deep practical knowledge of museology was essential to the venture's success, assigned the individual tasks and checked the results. He personally concentrated on the Technical Methods chapter, the longest and in many ways most important segment. Russell wrote the historical portion of the first chapter, the chapter on park libraries, and the final one on administrative relationships. Individual curators did most of the writing of the remainder with Ralph Lewis editing the bits into a more or less consistent style. Paul Hudson compiled the curatorial bibliography.

In spite of the haste things pulled together. The Park Service editor-in-chief received the finished typescript on June 1, and it went to the Government Printing Office in July. Russell made the wise decision to have it published with Burns' name as author. The 426-page *Field Manual for Museums* appeared in 1941, with copies going to all the parks. The manual served its intended purpose well, although leaving some matters that later became specific instructions to the discretion of park staffs. It also met a much wider need among museum workers outside the Service, selling so briskly that the GPO stock was exhausted by 1943.⁵⁸

The second unprogrammed task also stemmed from the rapid growth in museum work the Park Service was experiencing. The fact that park museums existed in all stages of development made it difficult even to know which ones to count. To obtain a better measure of its responsibilities the Museum Division sent to every park in November 1939 a memorandum of definitions and instructions accompanied by a data card and supplementary questionnaire. The survey results showed that within four years the number of park museums in active operation had grown from 36 to 114. The aggregate exhibit area of these small units exceeded that of the National Museum in Washington, and their 4.2 million visitors that year outnumbered those of any two of the three largest museums in the country.⁵⁹ Many parks still relied at least in part on temporary displays because the division could not yet schedule planning or preparation by the central staff. Curatorial work on study collections and museum records had not kept pace. The survey also indicated that furnished historic structure museums, of which the Service now had 38, comprised a significant and largely untouched segment of the problem.

This delineation of the division's growing task came at a time when the capability to deal with it was ebbing. Reductions in the work force accelerated as the national emphasis on war preparations increased. The Fort Hunt laboratory began losing its ECW supervisory artists by 1938. During that summer William Macy, the chief, had only Walter Weber and a student technician to help oversee the CCC enrollees. In October the division received permission to consolidate its two eastern laboratories.⁶⁰ The one at Fort Hunt closed. Macy became chief preparator of the Ford's Theatre laboratory and a few enrollees came in each day from their camp. Weber, a well-known wildlife artist, transferred to the Branch of Recreation and Land Planning.

In 1939 Burns obtained civil service status as permanent division chief. The Service also succeeded that year in establishing one civil service position for a preparator. Burns selected Rudolf Bauss, who had proven highly skilled, versatile, and dependable, for the appointment.⁶¹ In 1940 Morristown National Historical Park secured a civil service position for a park museum curator, the first opening of its kind. Paul Hudson entered on duty there that September. Alfred Hopkins, who had held the temporary curatorship at Morristown, transferred to Washington in his place.

Hudson had previously obtained a valuable training experience. Under a gift from the Carnegie Corporation of New York, the American Association of Museums offered grants-in-aid for foreign travel to 25 museum professionals in the United States and Canada. Hudson was among those chosen and spent two months traveling to French, German, and British museums on the brink of World War II. During the summer of 1940 Rosario Fiore returned to the laboratory staff to model the figures for the