

THE MUSEUM DIVISION, 1935-1946

The decision to place development of museums for the eastern historical parks in the hands of the National Park Service's most experienced museum worker led to results of wider import. It established a museum staff capability in the director's office that would remain uninterrupted for 35 years, until creation of the Harpers Ferry Center. It in turn stimulated the definition of Service-wide policies and procedures aimed at making park museums equal to any in America in terms of professional practice. It promoted the concept of a central staff to serve all park museums, a necessary factor in attaining professional standards. The activities of the central staff helped forge a unified chain of museums, each under the local control of the park superintendent but sharing a common nucleus of professional skills and guidance.

In 1935 history museums as a class lagged behind museums of art or natural history in numerous ways. The Park Service plunge into this backwater added substantially to the fund of ideas about history museum aims and methods. Most park museums also represented a distinct and as yet poorly defined category, now known as site museums. Here, too, the Service made important contributions to theory and practice. On the eve of America's entry into World War II, publication of the *Field Manual for Museums* won for the Service a position of international repute in museology. Meanwhile, the funding of park museum work eluded a stable solution.

The Eastern Museum Division

Carl Russell reported for duty in Washington on January 17, 1935. He found that the Branch of Research and Education had done nothing on the eastern museum projects while waiting for the allotment of funds to "equip" the new buildings already under construction. The fiscal year during which the money would be available was already more than half gone. His three branch colleagues had no real understanding of the task he faced and little incentive to help. Harold Bryant, the assistant director in charge, did not rate museums as important components of park interpretive programs and regarded Russell's assignment as a temporary measure to meet a passing need.¹

Verne Chatelain had a stronger interest in museums for historical parks. He considered them part of the domain he stood on the verge of winning in his fight for a separate branch of history. But he did not foresee more than a subordinate role for Russell, whom he thought would merely produce exhibits specified by the historians. Neither Chatelain nor Bryant sensed

what Russell saw clearly: that museums required thorough, knowledgeable planning. The field historians were not equipped by training or experience to prepare such plans. When Chatelain came to realize that Russell would have to provide the plans as well as produce the exhibits, he tried more obtuse methods of control.²

Earl Trager as chief of the Natural History Division had less involvement in Russell's mission because it concerned the historical parks primarily. But circumstances made him somewhat hostile as well. The new museum projects posed a threat to Trager's operation of the shop at Fort Hunt, and he would soon lose an even more cherished responsibility. The secretary of the interior's office was absorbing his Visual Education Section, taking the staff and equipment with which the Natural History Division was carrying on an active program of still and motion picture photography. Moving Russell into the office space vacated by the section rubbed salt in the wound.

The newly arrived museum expert thus began work at cross purposes with the branch establishment. He foresaw a museum division that would provide the continuing professional basis for the Service's entire museum program.³ Sharing this vision not at all, Bryant was justified in considering Russell's status temporary. Furloughed from his permanent civil service post, Russell became a PWA employee on January 19. The PWA appropriation would expire on June 30 and Congress had not acted to assure any extension of the program. The \$65,000 allotment for eastern museum projects had to cover his salary and travel, the hiring of equally temporary museum planners and preparators, the purchase of exhibit cases and library furniture for the museums under construction, and the equipping of an exhibit production laboratory. It also had to pay for his office furniture and secretary.

Before Russell could start to analyze these needs, museum matters at Colonial National Monument called him away. He spent eight days at the park trying to get the staff started on a museum development plan. Superintendent Floyd Flickinger's younger brother showed the most interest and agreed to undertake the assignment. For several months Russell nursed the hope that the finished plan could serve as a model for other historical parks. But the local staff could not decide among various proposals for future development, and the plan failed to materialize. The only solid accomplishment of the visit was a rough exhibit plan for a temporary installation. Russell worked it out with the historians and architects at the park to fit the reconstructed kitchen of the Swan Tavern complex at Yorktown. It provided about all that Colonial's \$3,050 share of PWA funds might suffice to produce.⁴

After only a few days back at his desk another matter requiring a museum expert again diverted Russell from the main task. Fort McHenry,

one of the parks transferred from the War Department in 1933, would shortly acquire by gift the E. Berkley Bowie Collection of some five hundred items, mostly firearms. The Service wished to have them on display by September 12, Francis Scott Key Day. Russell spent two days in Baltimore studying the available space and viewing the collection. The trip allowed him a long evening of discussion with E. W. W. Hoyt, Baltimore-based museum case salesman for Remington Rand, Inc. This company had taken over the business of A. N. Russell and Sons, manufacturers of Library Bureau and Russell-Built exhibit cases. Carl Russell knew from his Yellowstone experience that these cases with their narrow extruded bronze or aluminum frames, polished plate glass, and virtually dust-tight construction offered both protective and visual qualities he wanted park museums to have. Hoyt, driven by the depressed economy, was ready to work hard for a sale.

Hoyt gave Russell all the help he could in working up specifications for the exhibit cases to be purchased under the current PWA program. Russell welcomed this help, for the procurement deadline did not give him time to wait for completion of the exhibit plans, and he could not even visit each park scheduled to receive cases. Hoyt joined in talks with the architects to assure compatibility with planned interior spaces and finishes. He could also detail the intricate extrusions for the case frames, which had special features such as channels to hold filter wicks. Both men fulfilled their intentions in this collaboration. At the bid opening on June 10 Remington Rand submitted the only bid and obtained the \$22,000 order. Russell got the quality products he wanted, and Hoyt his salesman's commission. Hoyt continued to be helpful, pushing the Fort McHenry cases through production in time for the September event.⁵

Hoyt also let Russell know that Albert Brill Russell needed a job. A. B. Russell understood the fabrication of museum exhibit cases as well as anyone in the business. He could match Hoyt's skill in drafting practical specifications and do so without direct ties to any single manufacturer. A grandson of A. N. Russell and son of a former Library Bureau president, he had managed the museum case factory for years. After Remington Rand took over, he was replaced. Carl Russell hired him in the summer of 1935 as museum equipment engineer. He remained a valuable staff member as long as PWA-funded projects required the procurement of exhibit cases.⁶

A. B. Russell contributed more than the meticulous detailing of case construction. His sensitivity to needs voiced by curators and preparators set in motion a progressive modification of cases for use in the parks. Case bases increased in height to bring specimens into optimum viewing range. Other changes in dimensions, lighting, and glazing followed in later years as did the development of cases recessed into walls without sacrificing secure, dust-tight but accessible enclosure. A. B. Russell also established

a pattern of good working relationships with case manufacturers that continued for at least 25 years.⁷

Carl Russell's visit to Baltimore had emphasized in other ways the urgency of his staffing problem. The eastern museum program needed both preparators to build exhibits and planners to plan them. Russell proposed sending planners into the parks where PWA-funded museums were under construction. He wanted people with at least some museum training or experience and with a solid background in American history. When this combination proved practically impossible to find, he chose to accentuate the museum component by calling the positions curatorial, although they scarcely fitted the definition. Having drafted job descriptions for three grades—field curators to be paid at the annual rate of \$2,900, assistant curators at \$2,300, and museum assistants at \$1,800—he started recruiting.

Returning from a visit to the American Museum of Natural History, where Clark Wissler recommended three of his Yale graduate students, Russell stopped at Morristown to check on progress.⁸ A fresh look at the Morristown collection after he had seen the gun collection for Fort McHenry convinced him that he needed a real curator expert in firearms. His search led to a government employee in Washington who collected antiques as a hobby and had a special interest in weapons. John A. Sachse entered on duty March 19, 1935, apparently the first Park Service employee to bear the title of curator. After two weeks of preparation in Russell's office he went to Morristown to help develop the new museum at the park. There Vernon Setser, an ECW historical technician assigned from the park staff to prepare the exhibit plan, was trying to apply Russell's concept of a narrative museum, while Sachse favored the old method of simply displaying the whole collection with minimal explanation. His lack of academic qualifications hindered communication with his colleagues, and his organizational relationships with them were vague. Under these circumstances he left his post without orders in August and returned to Russell's office in Washington.⁹

Russell sent Sachse immediately to Fort McHenry, where his knowledge of guns was needed in a less complex situation. There he laid out and installed a temporary display of the Bowie collection in time for the September celebration. Afterward he catalogued the Bowie collection, photographed the objects in it, and prepared temporary labels. Then he demonstrated a growth in understanding by successfully planning a more permanent gun exhibit based on the collection. In line with Russell's progressive museological ideas his plan called for installing a selection of weapons and accouterments to outline the story of firearms in American history. Numerous illustrated labels would supplement the specimens. The bulk of the Bowie material would comprise a study collection in visible storage on the second floor. The plan also pointed out the environmental

hazards of the harbor-side location and the necessity of regular inspection and preservative treatment. Approved and carried out, this plan along with the collection catalogue marked Sachse's principal contribution. He went on to draft plans for a narrative exhibit to tell the Fort McHenry story and worked briefly on weapons collections at the Fredericksburg battlefield park and Morristown before his death in August 1938.¹⁰

In March and April 1935 seven prospective curators received notice of their appointments, two as assistant curators and five as museum assistants. Like all PWA positions, these were filled from a list maintained in the secretary of the interior's office. Getting on the list required the endorsement of the local Democratic Party chairman at the applicant's place of residence, although not every chairman questioned every applicant's party affiliation. In any case, Russell apparently got the men he requested. Each of the seven had some museum-connected experience, but science rather than history predominated in their graduate training. Most were archeologists or ethnologists, one was a botanist, and one was an entomologist. They all accepted appointments that extended only to June 30.¹¹

Each appointee reported to Russell in Washington for indoctrination before proceeding to the park where he would become a paid employee. His first assignment, he learned, would consist of preparing a general museum development plan, or prospectus as it was later termed. Collaborating with ECW historical technicians in the park, he would have to decide what facts and ideas the proposed museum needed to communicate. With the subject matter in succinct narrative form he would then outline the number and nature of exhibit units to accomplish this. The narrative and exhibit outline constituted the development plan. As soon as he submitted it, he was to start work on a detailed exhibit plan, called the museum master plan, specifying the content of each unit. Russell also felt it necessary to take each novice privately to the lounge of the Powhatan Hotel a few blocks up 18th Street, where he could speak freely about the serious antagonisms that existed in the Branch of Research and Education. The projected museum plans would have to navigate these troubled waters to gain approval.¹²

The novice curators carried with them a written guideline as well. Addressed to them and signed by Associate Director Arthur Demaray, it outlined the objectives of park museums, told how museum work in the Service was organized, and defined seven steps in the process of developing a park museum. What no one but Russell fully understood was that it also constituted the preliminary charter for the museum division he was striving to get established. The procedures it prescribed looked more to the future than to established practice. It followed closely the wording of a proposed Service-wide code of procedure he had drafted, whose full scope neither Bryant nor Chatelain was ready to approve. The code was in fact a

carefully studied revision of one prepared by Ansel Hall that would have confirmed Hall's central role in the museum program and left Russell at best as his eastern representative. Russell had begun rewriting it before being asked. Official recognition of his title as Chief, Eastern Museum Division, independent of Hall followed within a month Demaray's signature of the memorandum to the curators.¹³

The memorandum contributed to another effect perhaps not consciously intended. It stated clearly that "scientific and historical collections form the foundation for most exhibits" but conditioned this axiom by pointing out that graphic devices could help exhibits tell their stories. Reference to the versatile array of artists and craftsmen at the museum laboratory underlined the potential availability and usefulness of pictures, maps, models, and other visual aids. This reinforced several factors tending to diminish the role of historic objects in the museums being planned. The military parks to which the planners went lacked substantial collections of appropriate artifacts, even though some might have tons of unprocessed battlefield debris. Neither the curators nor the historical technicians could identify and interpret such objects in more than a rudimentary way, for scholarly study of material culture had as yet produced few reference works to help them. Few historical museums had tried to present a narrative history by means of specimens. No one really knew how to do it. The planners, on the other hand, could readily turn to the recently published 15-volume *Pageant of America* and the older 10-volume *Photographic History of the Civil War* to see for themselves how effectively pictures could combine with relatively brief texts for this purpose.¹⁴

In consequence, the first batch of eastern exhibit plans relied on graphic devices much more than on artifacts, prompting the following description of the first museum installation:

The planners . . . ignored the existing collection of historical relics. Illustrations were chosen on the basis of effectiveness. Even when pertinent objects were available, they were rejected if other devices seemed better. . . . The result is a historical museum almost without relics! In their place specially prepared paintings assume considerable importance. Maps, diagrams and models are used frequently. Most of the historical objects that are displayed merely supplement the vital illustrations and are placed on the floor of the cases.¹⁵

The description applied equally to contemporaneous historical installations in such western parks as Scotts Bluff, which Russell had planned the previous year. The guideline document had led park museums into an experimental mode that would produce further changes in current practice.

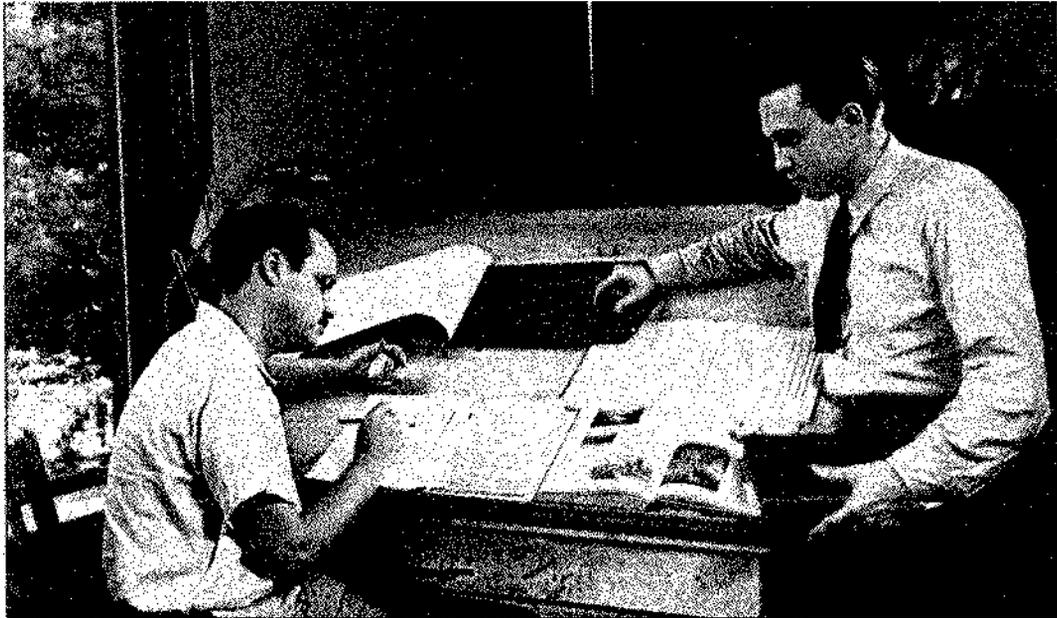
The initial experiments began in April as each planner/curator entered on duty at his park. Kenneth B. Disher went as curator and Nathaniel Everard as museum assistant to Chickamauga and Chattanooga National

Military Park, museum assistants Alden B. Stevens and Robert D. Starrett went to Shiloh, curator John C. Ewers and museum assistant Ralph H. Lewis went to Vicksburg, and Morris Titiev went alone as curator to Guilford Courthouse.¹⁶ They set to work with little time to spare before their jobs terminated at the end of June. A joint resolution of Congress approved April 8 gave the President \$5 billion to fund the various emergency relief agencies for another two years, but money to continue the eastern park museum projects was not released to the Service until February 1936. Russell did receive authority to prolong the current work beyond June 30, but for only one month. He made a quick trip to check on the progress of his planning curators, visiting Guilford Courthouse on June 24 and going on to Chattanooga the same night. Stevens and Lewis met him there with drafts of the Shiloh and Vicksburg plans. After reviewing the work accomplished so far, he sent Stevens to Great Smoky Mountains, Lewis to Hot Springs, and Titiev to Antietam National Battlefield Site to start museum plans there.

By the cutoff date Russell had obtained seven museum development plans and five exhibit plans from the curators he had sent to the parks. None of the exhibit plans contained all of the detailed specifications required for production. Work had to stop before that point, the men having been told that if they returned to Washington at their own expense, the Service would rehire them for another temporary project. Although his insistence that intensive planning precede exhibit preparation had not netted Russell a single completed exhibit plan, he felt the need to demonstrate the nature of these documents. He chose a sixth plan, equally incomplete but done under his watchful eye, to reproduce and distribute as an example.¹⁷

The success of Russell's eastern assignment and the future of his hopes for a museum division depended on getting exhibits prepared and installed in the new museums being built through PWA. He did not wait to have the exhibit plans in hand before setting up a central exhibit preparation facility. Lafayette Hall at Morristown had been selected the previous year as the best location. In February 1935 he began purchasing supplies and hiring preparators.

Arthur Ohlman, a versatile craftsman, was the first, followed by Wilfrid Swancourt Bronson, John W. Dawson, and Rosario Fiore. Bronson had accompanied the Bingham Expedition as artist and had already begun his career as a prolific writer and illustrator of children's books on various aspects of animal life. Dawson was trained particularly in oil painting. Fiore, a sculptor, adapted well to the miniature scale usually needed for museum exhibits. The preparation staff increased by six in late March: Joseph Andrews, a sculptor who later served as principal preparator for the National Museum's Department of Anthropology; Otto H. Jahn, a general preparator who specialized to a degree in large maps; artists Basil E.



Eastern Museum Laboratory at Morristown, c. 1936. Preparator Wilfred Bronson and curator John Ewers collaborate on an exhibit.

Martin and Harry C. Wood; Wilfred J. Mead, a technician and photographer who had worked under Russell at Yellowstone; and David H. Stech, probably an artist. By the end of May the group included at least two more artists, Joseph Colgan and Lloyd W. Biebigheiser.¹⁸

Having a talented staff at this stage created two temporary problems. Russell needed to find appropriate work for the men pending completion and approval of exhibit plans, and someone had to manage a potentially volatile crew. Several of the artists pitched into make layouts and sketches for the Morristown exhibit plan. Others built and installed some orientation displays for the Statue of Liberty, which the Service had recently acquired. When it became clear that Vernon Setser, the Morristown historian acting as museum planner, should not shoulder the extra task of shop manager, Ohlman served as interim leader.¹⁹

The new eastern museum program entailed a multifaceted workload that grew quickly. Russell found that he needed an assistant to oversee the planning and another to supervise exhibit preparation at Morristown. He soon had in mind the men he wanted for these two assignments but could not justify under PWA a pay rate to match their existing salaries.

The planning aspect being more urgent, he asked first for the transfer of Louis Schellbach from Berkeley. Schellbach understood from experience what park museum plans should accomplish and had amply demonstrated professional knowledge, skills, and energy for the task. His ECW status in the western program made it possible to offer him \$3,800 rather than the

lower amount set in the PWA schedule. A telegraphic order from Associate Director Demaray proved necessary to force his move over Ansel Hall's resistance. Schellbach reported in Washington on April 12, and for the next month and a half he gave good support to the planning program for the six PWA park museum projects. He found the office strife and administrative constraints frustrating, however, and some of his actions threatened to upset carefully nurtured relations with the architects. In early June Russell shifted him to a fresh planning job that suited him better and kept him productively engaged until he returned to Berkeley in September.²⁰

Before the architectural problem came to a head, Russell had obtained his other assistant. It took only two encounters with Ned Burns to convince him that Burns was the "best man I know of in preparation."²¹ Burns in fact knew a great deal about museum work besides exhibit preparation. As a schoolboy he had discovered the Staten Island Museum near his home. Under the tutelage of William T. Davis and Charles W. Leng, museum volunteers and renowned amateur entomologists, Ned received field training in observation and interpretation that any park naturalist might envy. When his father's death ruled out college and required him to help support the family, the Staten Island Museum offered him a job as guard. His duties included janitorial work, serving as projectionist for public lectures, giving talks and tours, and preparing exhibits that included three creditable miniature groups. After five years he joined the preparation staff at the American Museum of Natural History, where he learned taxidermy among many other skills. At night he attended classes in design, painting, and sculpture at the New York School of Industrial Arts and the Art Students League.

After nearly six years at the American Museum Burns was offered the post of chief preparator for the newly organized Museum of the City of New York. Burns did more for the museum than create outstanding exhibits. He served as its business manager and later as assistant director. His responsibilities ranged from hiring guards and maintenance staff to defending the budget at city hall. In the process he gained a working knowledge of local politics down to the ward level. All this helped equip him to administer a major national museum program.²²

When Russell conferred with Burns in New York on February 23, he had little hope of attracting him to the Park Service. The museum paid Burns several hundred dollars more per year than the Service could offer. It must have been a surprise to receive an application from him in March stating that he would accept a salary of \$3,800. To meet that price Russell probably had to wait until Schellbach's transfer to PWA set a precedent. By the end of April worsening conditions at the inadequately supervised preparation shops led him to recommend Burns' appointment as superintendent of field laboratories at Morristown. The salary grade delayed

approval, but Burns entered on duty June 3. He reported for a brief introductory assignment in Washington while Russell's architectural problem was boiling.

Until 1934 the architectural development of park museums proceeded smoothly. Herbert Maier designed most of the museum buildings and supervised their construction. Through his association with Hermon Bumpus and the Buffalo Museum of Science he gained an understanding of the special functional needs that characterize museums. He also worked comfortably within Park Service design constraints, which called for the use of native materials and a rustic style fitting the natural settings. Jesse Nusbaum, who designed the Mesa Verde museum building, also knew from experience what kinds of space a museum required. At Yosemite and Yellowstone Russell learned to work hand-in-hand with the architect as he planned and installed exhibits. Such collaboration continued when the 1934-35 PWA program funded five new museums in western parks. Service architects in the San Francisco office tackled the building designs and specifications in coordination with exhibit planning being carried on by the augmented curatorial staff headquartered at Berkeley. Architect Leffler Miller served as an effective go-between, working in the field with exhibit planners while keeping in close touch with his professional colleagues preparing the building plans.²³

The simultaneous PWA program in the East faced a different set of circumstances. The influx of historical parks from a government reorganization in 1933 brought the Service many architectural problems. The new areas contained numerous historic structures in critical need of preservation or restoration. They also lacked buildings of various kinds necessary for their increased public use. The Branch of Plans and Design promptly set up an eastern division under Deputy Chief Architect Charles E. Peterson to prepare designs and specifications and inspect the work of construction contractors.

The 1934-35 PWA allotments provided for new combination administration/museum buildings in five eastern parks: Chickamauga and Chattanooga, Guilford Courthouse, Shiloh, Vicksburg, and Morristown. The eastern architectural staff undertook planning for the first four and contracted Morristown, the largest, to New York architect John Russell Pope, who had designed the Roosevelt Memorial Wing for the American Museum of Natural History and would soon be awarded the architectural contract for the National Gallery of Art. Adapting its design guidelines to the eastern situation, the Service called for buildings that would reflect in style and materials local structures characteristic of the historical period commemorated by each park.

By the time a museum expert who could advise the architects became available in the director's office, three of these projects were already under

construction. Plans for the other two were completed in the spring of 1935.²⁴ Predictably, those designed by Service architects without special knowledge of museum requirements proved ill-suited to their purpose. The Vicksburg building resembled so well an antebellum plantation mansion that a later superintendent converted it to his residence and packed the museum off to a utilitarian frame structure elsewhere in the park. At Chickamauga the museum occupied a balcony overlooking the lobby. Not only was access by a single stairway poor and perhaps hazardous, the space opened onto the lobby along one side and had windows along the opposite wall leaving only the short end walls as convenient exhibit areas.

After Russell arrived in Washington, he lost no time in establishing contact with the architects. When he could study their plans more closely, he found that the "Branch of Plans and Designs [sic] guards the interiors they are building quite as carefully as they do the exteriors." He could hardly blame the architects for the poor treatment of museum needs, for his own branch had done nothing to define them. Instead he resolved to work as best he could within the shortcomings of the projects underway to build a solid basis of cooperation for the next round of new museum facilities.²⁵

Louis Schellbach nearly spoiled the scheme. Working with the planning curators, he incited some of them to challenge the architects and demand changes, mostly the closing of windows. His objections were valid but untimely. When they involved Pope's plans for Morristown, Tom Vint, chief of Plans and Design, called for a top-level conference. He appreciated the deficiencies in design but needed to establish acceptable procedures. His understanding leadership and Russell's commitment to shared responsibility in museum planning insured that curators and architects would do their best to keep in step as they worked on such projects. Although the immediate future gave relatively few opportunities to practice the principle, continual interplay between the two professions over the years clearly benefited Park Service museums.²⁶

Russell's dream of a central museum division to serve all the national parks became a reality on December 2, 1935, when Director Arno B. Cammerer signed Office Order No. 312. "Until further notice, all matters pertaining to museum activities of the national park system will be handled by the Museum Division, Branch of Research and Education, of which Division Dr. C. P. Russell is hereby designated as Chief," it stated in part. "The functions of the Museum Division are to supervise and coordinate all museum activities, including those of the Field Education Division, the new Interior Building Museum, the Museum Laboratory at Morristown, New Jersey, and the Fort Hunt (Virginia) Model Laboratory."²⁷ The order terminated the brief existence of the Eastern Museum Division as an organizational unit.

The Interior Department Museum

The Department of the Interior faced what Secretary Harold Ickes saw as an identity problem. The average taxpayer could surmise what most federal executive departments did from their names—Agriculture, Commerce, Post Office, Treasury, and War, for example. But what did Interior do? To help answer this question Ickes decided to establish a museum whose exhibits would explain the history, purposes, and activities of the various bureaus. The construction of a new building for the department provided the opportunity to carry out his idea.

In mid-February 1935 Associate Director Demaray told Russell he was recommending to the secretary that Russell serve on a small committee for the proposed museum. Russell gave the matter little thought for several weeks until he learned that he was chairman of the committee and that Ickes expected action. The committee promptly conferred with the architect for the new building and learned that he was allowing less and less space in the floor plans for a museum. His tune changed late in April after the secretary made it evident that he was in earnest. The museum would occupy an entire wing of the first floor close to the main entrance. Russell was still unenthusiastic but ruefully conjectured that "one fool minor project like one museum in Washington, D.C., will probably be the salvation of a coordinated national program of museums in the National Parks."²⁸

Russell got busy contacting the various bureau heads and estimating costs. When the Service received notice on May 24 that a \$100,000 PWA allotment for the Interior Museum would be forthcoming, the project became an urgent activity of his division. He seized the opportunity to reassign Schellbach as chief curator of the museum beginning June 1 and make him responsible for producing the necessary plans. The initial phase would be especially complex, so Russell assigned Ned Burns to help. Burns, who was just entering on duty, needed to become familiar with the overall organization of Park Service museum work anyway, so his introductory stay in Washington served a double purpose.

Schellbach and Burns spent the first half of June developing a scheme to convert the space designed for offices into a functional exhibit hall. They had to cope with a long, narrow, rather low-ceilinged wing containing a double row of load-bearing columns. They also had to work out reasonable adaptations of wiring, heating, and air conditioning provisions not originally intended for museum purposes. Their solution involved a system of furred walls dividing the space into alcoves that provided a well-defined area for each bureau's exhibits. The alcoves would be cove-lighted and the walls would accommodate recessed cases designed to roll out for access to wiring and ducts. In mid-June Burns took up his post as superintendent of the preparation laboratory at Morristown well acquainted with the physical

requirements of its first big production job.²⁹ Schellbach continued on the detailed planning for conversion of the wing and by the end of July was ready to have exhibit planning start.

Four of the planning curators whose appointments terminated July 31 returned to Washington to work on the Interior Museum. Schellbach assigned Kenneth Disher to the Bureau of Reclamation exhibits, John Ewers to those for the General Land Office, Morris Titiev to those for the Bureau of Indian Affairs, and Ralph Lewis to those for the Bureau of Mines. Fritioff Fryxell joined them to prepare the Geological Survey plan. Titiev transferred to Chatelain's staff in the new Branch of Historic Sites and Buildings after about two months and Alden Stevens succeeded him. Stevens also worked on the National Park Service alcove.

Each curator had to consult with bureau officials, digest the information the bureau wanted to present, develop an acceptable story sequence, and then prepare detailed exhibit specifications including label copy. The curators had no office but worked at their planning around a large reading table in the stacks of the Geological Survey library. After Schellbach transferred back to the Field Division of Education at Berkeley in September, Fryxell filled in as acting chief curator until late October when his promised appointment in Berkeley became available. Russell then assigned coordination of Interior Museum planning to Disher. The curators submitted exhibit plans for five of the bureaus during October.³⁰

On the average the Interior exhibit plans made better use of specimens than had those for the first round of historical park museums. Some of the subject matter, including Indian material culture and technological aspects of surveying and mining, lent itself to objective illustration. When finally installed, the museum's 95 exhibit units contained a thousand objects. The museum also had to deal with unavoidably prosaic matters of bureaucratic policy and organization, which were difficult to make visually stimulating. To counterbalance less exciting displays, the plans called for increased use of dioramas, including ten of these popular devices. Miniature groups modeled in perspective and blended into painted background scenes were not new to museums, although calling them dioramas was a recent misnomer. They had captured the imagination of many visitors to the 1933 Century of Progress Exposition in Chicago. The fact that Ned Burns was an acknowledged master in the art of diorama creation doubtless influenced the planners as well.³¹

At Morristown Burns readied the laboratory to start production of the Interior Museum exhibits as quickly as progress on the curators' plans would allow. He could appreciate the influence the project might have on the future of the Park Service museum program. The laboratory's handiwork would stand on display at the seat of power. The secretary of the interior, the director of the National Park Service, and their principal

lieutenants would inevitably see and react to the exhibits. On this evidence the decision-makers would tend to judge the capability of the Service to create park museums of creditable quality and functional value.

To meet the challenge Burns strengthened the preparation staff. First he brought in two young men who had worked under him before on difficult and successful dioramas. Donald M. Johnson and Albert McClure, who possessed fine manual skills and a knowledge of the technical problems involved, would become mainstays of the prewar laboratory and in due course assistant chief preparators. Their arrival gave Burns 21 people hard at work on the Interior Museum exhibits by the end of 1935: twelve preparators, three per diem carpenters, and three additional per diem helpers along with John Ewers as field curator, A. B. Russell as equipment engineer, and Maxwell S. Fulcher as clerk. Preparation was then well underway on three dioramas, two mural maps, a set of four large paintings, and several smaller illustrations.³²

The diorama probably started first had as its cannily chosen subject General Washington welcoming Lafayette on the steps of the Ford House in Morristown. This scene for the Park Service alcove well illustrated the nature of the new historical parks. The proximity of the Ford House to the laboratory simplified the task of copying intricate architectural details, with consequent cost savings. The laboratory could save more money by reusing the molds and data to duplicate the group, with only minor changes, for the Morristown museum. Burns would later cut costs on two more park museum dioramas by modified reproduction of others in the Interior Museum.

In the next few months Burns hired five more excellent preparators. Herman Van Cott and Lee Warthen were mature artists, talented and free from temperamental eccentricities, who painted historically accurate illustrations to carry exhibit narratives. Arthur A. Jansson worked on diorama backgrounds to a large extent. Rudolf W. Bauss and Frank G. Urban came as skilled model makers, Bauss having served a full apprenticeship as a wood carver on fine furniture in Germany. Burns also had on the payroll William H. Jackson, Civil War veteran, pioneer photographer, bullwhacker, and artist. Then in his early nineties, Jackson worked in his own New York studio. He painted several pictures for the Interior Museum, but his unique contribution consisted of costume sketches and notes for a diorama depicting the 1870 Yellowstone campfire where the national park idea traditionally originated. Because Jackson himself had camped in Yellowstone as a member of the 1871 Hayden Expedition, his advice lent considerable authenticity to the details.³³

To support the work of the preparators the laboratory relied for curatorial services on John Ewers, Alden Stevens, Robert Starrett, Paul Hudson, Ralph Lewis, and Stuart Cuthbertson, the latter a former historical

technician at Vicksburg. They had to finish exhibit plans for the remaining bureaus and provide the voluminous information on which production of the illustrations, maps, models, and other graphic devices depended. One curator stationed at Morristown supplied a flow of such data from sources in the New York area and checked the accuracy of what the artists produced. Others in Washington gathered from the bureaus specimens, photographs, and all the facts and figures the exhibits would present.

In the spring of 1936 Burns transferred from Morristown to Washington. He was chief curator of the Interior Museum until August, when he became acting chief of the Museum Division. The change brought wider responsibilities with less opportunity to concentrate on Interior Museum matters. The Morristown laboratory was left in charge of Arthur Jansson, who was not well equipped for the role. Production nevertheless continued without apparent loss of quality until Burns resumed personal oversight. This came about when the laboratory moved to the second and third floors of the Ford's Theatre building in Washington, over the Lincoln Museum, that fall. The new location enabled Burns to maintain the Museum Division office in the Interior Building and spend time almost daily at the laboratory.

Two preparators left the Service rather than transfer to Washington. Wilfrid Bronson resumed writing and illustrating books at his Hudson Valley studio. Lynn A. Royal, a model maker from the University of Rochester museum, probably returned to that city. The six per diem employees could not follow the laboratory. The group that did go suffered some gradual erosion as individual preparators found positions in other government offices that seemed more permanent than a PWA project. Burns hired a few temporary replacements as needed, and at Secretary Ickes's request he employed Harry L. Raul, a quiet, middle-aged, pipe-smoking artist, as a diorama sculptor.

Exhibit preparation more than kept pace with construction of the new Interior Building. The contractor began finish work on the museum wing in March 1937. By July the laboratory started to install the dioramas. A strike by the contractor's painters delayed progress, as did difficulties encountered by the case manufacturer. The Interior Museum finally opened to the public on March 9, 1938, under Park Service operation. It received favorable comment and began attracting some 10,000 visitors per month. Paul Hudson, designated acting curator, set it on an active course with support from the laboratory. The exhibits underwent the minor modifications that normally follow a new installation, and the laboratory made a few changes to update information—a service the museum would continually require but seldom receive.

Hudson organized collection storage and records and worked especially to develop use of the museum. He opened it Sunday afternoons, publicized it, prepared a mimeographed leaflet, arranged temporary displays,

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

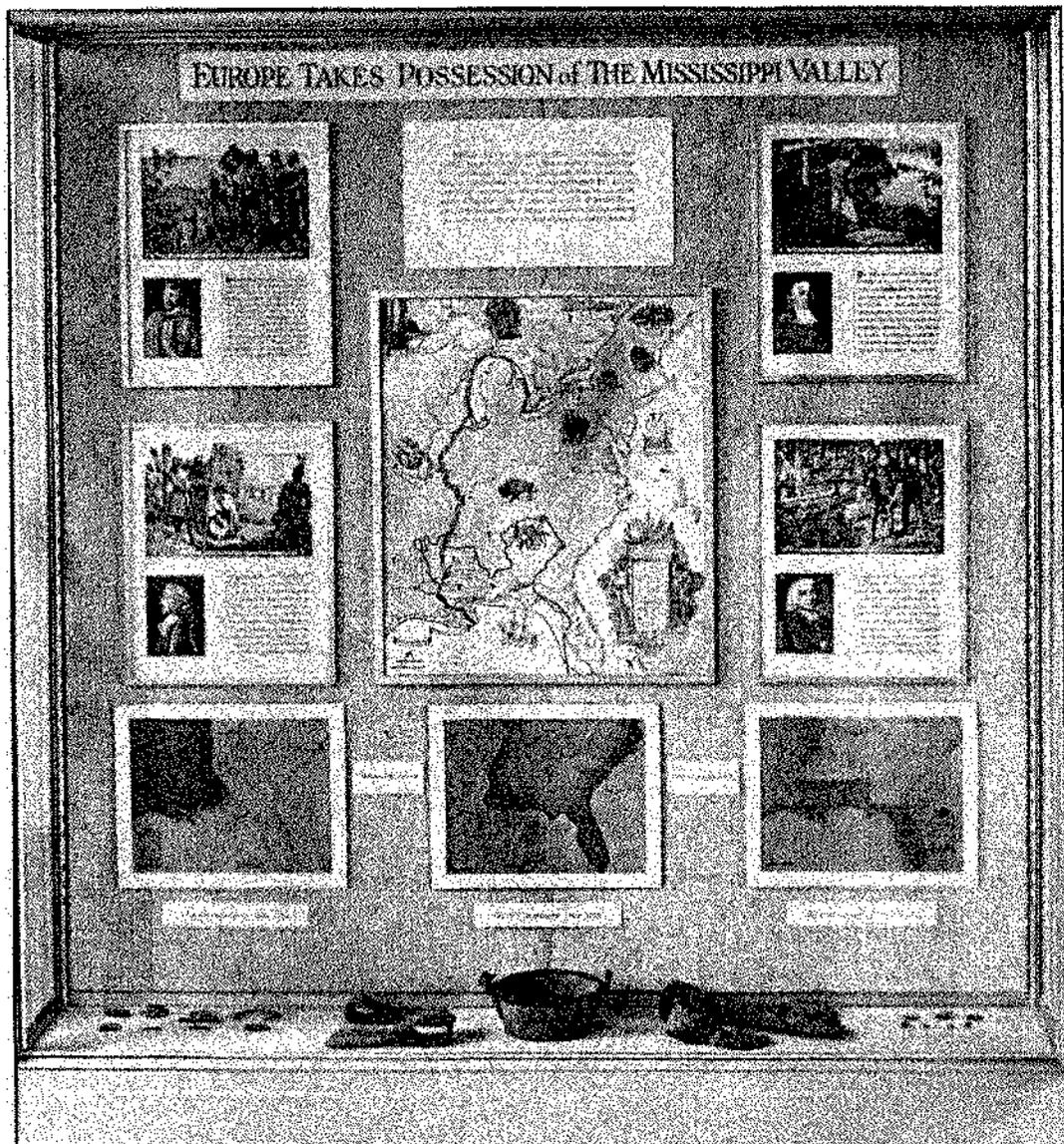
returned to Washington to succeed him as supervisor of research and information. Overseeing the Museum, Naturalist, and Wildlife divisions, he gave strong support to the museum program without circumscribing Burns, who had earned his full confidence.³⁹

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

last St. Louis diorama, but Albert McClure accepted a civil service appointment with the Bureau of Reclamation in Denver. Six WPA library project workers assigned to the laboratory from mid-summer 1940 until April 1941 added material to a picture morgue intended for convenient reference by the preparators.⁶²

The pace of change quickened in 1941. As the Jefferson National Expansion Memorial allotment ran low, it became necessary to furlough employees for lack of funds. Preparators Johnson and Wood left at the end of February. Fiore transferred to another agency in March, and Warthen's furlough began in April. By the end of April the eastern preparation staff consisted only of Bauss, Macy, and five or six CCC enrollees. The curatorial staff had to go also. In March Starrett left the St. Louis project to become assistant park naturalist at what is now Lake Mead National Recreation Area. Hopkins went on furlough in April. Lewis continued on duty to tie up loose ends of the St. Louis museum planning project and mind the division office until Burns returned from his inspection of western park museum matters. July brought an ECW cut that forced the termination of Maxwell Fulcher's clerical position. When Burns got back to Washington in late August, Lewis departed after having been on leave-without-pay status for part of the month, leaving the division chief with no office staff.

Macy transferred to the Navy Department in February 1942. That July lack of regularly appropriated funds required Bauss to go on the St. Louis payroll although remaining headquartered at the Ford's Theatre building. The eastern laboratory ceased to exist when the Office of Strategic Services took over the space and equipment in the building to make flexible relief maps for military use and Bauss became museum specialist for National Capital Parks, a position he filled ably for the rest of his life.⁶³ Transfer of the Museum Division office in October to Chicago, where Park Service administration was centered for the duration, reduced it to its minimum wartime level.

A reprieve allowed one more park museum to open. Park Service acquisition of the Old St. Louis Courthouse by gift in 1940 added the historic but dilapidated structure to the Jefferson National Expansion Memorial. With rehabilitation, the building would provide ample space for the memorial's offices and for a temporary museum containing the sample exhibits the Museum Division had prepared. For the latter, the Service received WPA approval in September 1941 to sponsor work by the St. Louis County unit of the WPA Missouri Art Project.

Burns acted promptly to recall needed staff. Lewis reentered on duty September 15 and went at once to St. Louis to oversee preparation of the museum space and installation of the exhibits. Lee Warthen returned to the Ford's Theatre laboratory in October to help Bauss and Macy pack the exhibits for shipment, remaining until he transferred to the Navy Depart-

ment at year's end. Hopkins, also recalled in October, worked on fur trade questions and other curatorial research in Washington until sent to help install the exhibits. David Rodnick, a social anthropologist from the Branch of Historic Sites, went to St. Louis as an additional curator. The sample exhibits left Washington via railway freight in February 1942, followed by Burns and Bauss in March to unpack them and set the dioramas in place. The local WPA workers spent several months constructing furred wall and exhibit cases while the curators assembled specimens, prepared label copy, and undertook the final installation.⁶⁴

The interim Museum of National Expansion opened in October. It contained only about thirty exhibits but provided a base for the memorial's wartime interpretive program. It also represented a distinct transition in Park Service display methods. Gone were most of the monk's cloth backgrounds, free-standing cases, and illustrations drawn or painted in the museum laboratories. Newfangled fluorescent lamps illuminated the brightly painted interiors of the built-in cases. Cutout cardboard letters formed many of the captions. Specimens supplemented by photographs or photostats of old documents dominated most of the exhibits.⁶⁵ The installation foreshadowed postwar changes.

The Museum Division Program in the West to 1942

When Carl Russell left Berkeley in January 1935 to initiate systematic museum development for eastern parks, the Field Division of Education already had a large operation underway. Its rapid expansion (described at the end of Chapter Two) led to obvious differences between the western and eastern programs, but the two had basic similarities. The ECW/CCC component of the Berkeley organization paralleled generally the Fort Hunt laboratory in the East. Both were funded by the same emergency relief agency and specialized in producing topographic models. They differed principally in the role of the ECW technicians. Those at Fort Hunt were all artists. They concentrated on training the CCC enrollees in model making skills, overseeing their work, and supplementing it as necessary. The Field Division employed a slightly larger number of ECW technicians, including men with curatorial, architectural, and academic experience whom Ansel Hall considered the backbone of his staff. He used them to prepare museum development plans and exhibit plans in the field, to carry out research for exhibit content, and to perform broad supervisory functions in the exhibit laboratories.⁶⁶

East and West also relied in similar ways on PWA funding. In fact PWA supplied the primary focus of museum work for both western and eastern parks from the start of New Deal emergency relief in 1933 through 1937. In 1933 and 1934, as noted previously, PWA allotted money to

construct museums in parks but failed to provide for their contents. Five of these projects were in western parks: administration/museum buildings for Aztec Ruins, Devils Tower, and Scotts Bluff national monuments, an extension of the Mesa Verde Museum, and conversion of Moraine Park Lodge in Rocky Mountain National Park to a museum. While exhibit development for the eastern PWA museums had to wait for funding, Hall could set his ECW and CWA employees to work on these projects at once. ECW technicians and selected CWA workers pushed ahead with the planning and research during 1934 and CWA artists began exhibit preparation. The termination of CWA early that year slowed progress but a fresh host of SERA recipients, although less versatile, allowed some preparation to continue.

At the end of 1934 a reprogramming of \$65,000 in PWA funds permitted exhibit planning and preparation for the eastern projects to start under Russell in Washington. A portion of this money, \$15,100 for the five western projects, went to Berkeley. Hall used much of it to hire a staff of about eight preparators, a curator, and clerical help. This group corresponded in composition and funding to the Morristown laboratory, which was being established about the same time. The western PWA preparators concentrated first on exhibits for the Moraine Park museum but also started some for Aztec Ruins and Scotts Bluff.⁶⁷

As in the East, this first allotment proved woefully inadequate to complete the projects. Hall therefore went to Washington in August 1935 in search of additional funding. He arrived just as the Service prepared to ask for a second reprogramming of PWA money to continue the work of "equipping" park museums. In collaboration with Russell, he drafted a proposal that included not only the PWA-funded buildings but also museum projects in nine additional western parks. The latter entailed upgrading older exhibits, replacing temporary ones, adding individual displays, and outfitting space converted to museum use. Four months later, as noted above, PWA approved the allocation of \$53,000 to do what he had proposed. This was barely half his estimate of what the jobs would cost. He tried to drop some of the projects from the program, but too late.⁶⁸

The PWA preparators, assisted substantially by WPA and CCC workers, produced and installed many creditable exhibits but could not hope to accomplish the whole program. When Russell summarized results in mid-1940, he listed the little museum at Devils Tower as complete. He did the same for the installations at Moraine Park and Mesa Verde, thanks in part to significant help from the talented park staff at the latter. The Aztec Ruins museum still required more exhibits. Scotts Bluff also remained unfinished because a wing for paleontology had been added. The PWA staff was largely responsible for the museum installation at Jenny Lake in Grand Teton and for helping Yosemite and Petrified Forest replace

or expand their exhibits.⁶⁹ Most of the preparators supported by the \$53,000 allocation remained on the payroll until October 1937. After that the western laboratories did not have a PWA staff as such but continued to have important PWA work to do.

In the 1937 fiscal year Public Works allotted \$50,000 to the Park Service for an administration/museum building at Tumacacori National Monument. After a brief altercation between Burns and Hall, the exhibit planning and preparation responsibility came to rest at Berkeley. PWA curator Russell Hastings and Captain D. W. Page prepared the exhibit plan, approved by the director in January but considerably modified as research and preparation continued. The exhibits included three dioramas that engaged the skillful hands of Bartlett Frost as sculptor. One group, depicting a service in the mission church, was enhanced by appropriate recorded music and a touch of animation that made the altar candles appear lighted. The combined effect moved some devout visitors to join the miniature worshipers in kneeling before the altar. Collaboration between the architects and museum planners led to an arched window in the museum framing a striking view of the mission. The introductory display, an electric map tracing Spanish missionary journeys, was less successful. After a WPA craftsman struggled with it for about three years, it finally went to the park with a thick maintenance and operation manual. As Burns doubtless feared, it failed to work satisfactorily.

The 1940 PWA program included two more museums for western parks. Before the impending war stopped production, the Painted Desert museum at Petrified Forest received most of its exhibits but the Walnut Canyon museum got only empty cases. Park interpreters filled them with "temporary" exhibits before the central staff could return to the task after the war. The tendency of such exhibits to become permanent led to more stringent restrictions against local initiative in exhibit installations, for lowered standards in one park undermined the stature of park museums generally.

Although the succession of western PWA projects matched eastern ones, two aspects of the western program had little counterpart in the East. One involved the Works Progress Administration.

Hall's trip to Washington in mid-1935 sought more than the continuation and expansion of his PWA projects. SERA help to the Field Division of Education in the form of about 150 workers was scheduled to end. He had already submitted a comparable proposal for assistance from WPA, a new relief agency. Although Russell wanted none of this low-paid, largely unspecialized manpower for the eastern laboratory, he went along with the idea for the West and for a possible backup if the PWA request failed. Hall did get approval for WPA projects to continue at approximately the same level as the varied tasks SERA had done. The WPA work force seems to

have averaged about 160 through 1939, falling to about 130 in 1940 and 95 in 1941 until the projects terminated that July.⁷⁰

WPA dominated the western museum production program for five and a half years. Most of the workers, like their SERA predecessors, lacked the skills required for specialized exhibit preparation, but their supervisors could direct them in constructing cases and fittings and in supplementing the more creative work of the PWA preparators in other ways. Much of the WPA effort aimed to supply things the western park naturalists needed besides museum exhibits.

With this busy and rather complex program in full swing, Ansel Hall left the Park Service in April 1937. Dorr Yeager, Russell's successor as Hall's assistant, took over as assistant chief of the Museum Division, and the Field Division of Education became the Western Museum Laboratories.⁷¹

Hall's resignation gave Yeager responsibility for five WPA projects, three of them in-house. A Federal Art Project employed 17 people, most of them photographers or artists on relief. Although they doubtless contributed to the preparation of exhibit graphics, their principal product was lantern slides for illustrating lectures in the parks. The project staff colored hundreds of the slides by hand. In July 1937 this group became part of the much larger Museum Project, whose workers included carpenters, a variety of other craftsmen, and numerous support personnel. They built cases, worked on exhibit elements, and also produced most of the miscellaneous products that the Western Laboratories supplied to parks. The third WPA project concentrated on compiling an annotated bibliography of the western parks. It picked up the task begun earlier by CWA in July 1936 and during most of 1937 employed around fifty people, although the number swelled to 103 in May. The project continued at a reduced level until August 1938, then merged into the Museum Project. By that time it had gathered, typed, and filed 63,656 entries. The first thick volume of the bibliography was mimeographed and bound in 1941. The second volume, still incomplete for some parks, was sent to Washington for mimeographing and temporary binding in paper covers.⁷²

The other two WPA projects under Yeager's care worked at a distance. The Southwest Museum in Los Angeles hosted a Federal Art Project until mid-1937. Operating under the immediate supervision of Mark R. Harrington, a leading anthropologist and official of the museum who served in this instance as a Park Service consultant, it had up to 27 selected WPA employees. They produced Indian dioramas for Yosemite and Glacier, illustrations and models for Tumacacori, and a series of accurately costumed miniature figures representing western Indian tribes intended primarily for reference. The Southwest Museum received photographic work from the project in return. As a separate Federal Art Project in San



Western Museum Laboratories, 1937. Dorr G. Yeager (left) views the mass diorama for Tumacacori National Monument with Secretary of Agriculture Henry A. Wallace.

Diego, a WPA photographer assisted by a few National Youth Administration employees supplied the Berkeley laboratories with annotated reference photographs of historic objects accessible in the San Diego vicinity. The Service ended its sponsorship of this project in mid-1937 also. The merger of the museum and bibliography projects a year later left Yeager with only one large WPA project, but by then he had a somewhat comparable NYA project as well. The number of its young workers in training fluctuated monthly from a maximum of 81 in May 1938 down to four in June 1940, when the project terminated.⁷³

Instability in the size of the work force was only one of the factors that made running the Western Museum Laboratories a challenging assignment. After WPA tightened its regulations in 1939 to prevent keeping individuals on project rolls longer than 18 months, the Museum Project lost 81 of its most experienced workers and had to accept untrained replacements. In March 1939 a rent increase forced the laboratories to vacate the building housing the largest unit. New quarters were found in neighboring Emeryville, but a disagreement over the lease kept the workers without heat or electricity until May. Two years later "defense training projects" drained off more of the best WPA help, and July 1941 witnessed the end of the Museum Project. In spite of the headaches inherent in its size and nature, the project and the earlier ones it absorbed served the western museum program well.

To obtain more efficient production Yeager integrated his diverse WPA, NYA, PWA, and ECW/CCC staffs into specialized departments. The

Art Department prepared illustrations, maps, models, dioramas, other graphic devices, and lettering for museum exhibits. The artists also drafted layouts for exhibit plans, designed posters, and used their particular skills as needed. The Shop Department did the woodworking and metalworking, casting, and a wide variety of fabrication. It produced exhibit cases, storage cabinets, and other museum furniture and built special equipment for shop use. The Photographic Department, which for a time had five darkrooms in continual operation, turned out negatives and prints by the thousands. It later included the lantern slide assembly line that Yeager transferred from the Art Department. For most of its existence the Bibliography Project operated outside the departmental units. Each department had workers to handle the necessarily bulky paperwork, keep shop and office equipment in repair, and do routine cleaning and maintenance. As demands from the field grew, Yeager added a Miscellaneous Products Department.⁷⁴

One obvious problem with a large force of unselected emergency relief workers was finding productive tasks within their capabilities. Ansel Hall began the practice of offering the parks various services or equipment these workers could supply. Because the relief agencies paid their salaries, this help cost the parks practically nothing, and many took advantage of the opportunity. The Western Museum Laboratories gained a reputation for service that the eastern laboratory with its unavoidable pay-as-you-go policy could not match.

In April 1938 Yeager issued a catalog of available products and services. Its 21 items included specimen storage cabinets for natural history collections, elaborate filing cabinets for lantern slides, nature trail labels, and such services as mounting herbarium specimens, developing and printing films, and framing pictures. A second edition of the catalog the next year added nine items embracing exhibit cases, filing and carrying equipment for the new 2"x2" kodaslates, and more kinds of natural history collecting equipment. Book repairing, map mounting, and a few other services were added in 1941 when the shrinking staff and scarcity of materials eliminated a number of familiar items.⁷⁵ For most products parks paid only transportation costs, although they could be charged for materials if these were expensive or their orders large. A fine museum exhibit case might cost a park \$62 plus shipping—hundreds of dollars less than from a regular manufacturer.

The abundance of "free" labor also permitted the Western Museum Laboratories to try new processes. They produced a successfully animated representation of the "Pacific Circle of Fire" used in an exhibit for Lassen Volcanic National Park and duplicated for Mount Rainier. Yeager had his shop try fluorescent lighting and silkscreen printing in 1938. Soon park naturalists could order colorful silkscreened posters to announce their programs. In 1939 the laboratories started to produce molded thermoplastic

letters for exhibits. The parks ordered stocks of them to caption their temporary displays. After close consultation with Ned Burns, Yeager and his staff designed an exhibit case tightly constructed of oak with a removable plate glass front. The glass was framed with aluminum extrusions patterned after those used by commercial manufacturers of the best museum cases. WPA workers could build the cases and make them practically as dust-tight as factory-built ones. Difficulties in obtaining the extrusions delayed production until August 1940, but the framing arrived in time for the laboratories to furnish cases for several western park museums at the substantial cost savings noted above.⁷⁶

The large emergency relief operation that made possible such developments did not constitute the only signal difference between the western and eastern programs. Following a practice that Ansel Hall had fostered from the beginning of the Field Educational Headquarters, western park naturalists went frequently to Berkeley on short-term assignment. They no longer did so to build their own exhibits but worked particularly on exhibit plans that the laboratories hoped to carry out for them. They could also help assemble data for the preparators and assure accuracy in content. When Yosemite wanted to add a working model to the geological exhibits in its museum, for example, a member of the naturalist's staff collaborated in Berkeley on its design, construction, and necessary mechanical revision. Such shared experiences developed cooperative relationships that helped both the parks and the laboratories.

In much the same way, Berkeley used outside experts on short assignments to assist with exhibit planning and execution. Francois Matthes of the U.S. Geological Survey spent several months with the Berkeley staff in 1937. Fritioff Fryxell came in to plan museums for Grand Teton, Lassen, and Sequoia. Charles W. Sternberg from the University of Chicago was engaged in the summer of 1939 to work on the exhibit plan for the Scotts Bluff wing. In 1940 Yeager rehired Arthur Woodward as a part-time research collaborator to help with plans for the Painted Desert museum and one at Pipe Springs National Monument.⁷⁷

The Western Museum Laboratories provided the exhibits for a number of park museums in addition to the PWA project museums noted above. To complete the one erected by CCC labor in what is now Guernsey State Park, Wyoming, they designed and prepared an unusually graphic set of exhibits during the last half of 1938. The new museum at White Sands National Monument funded by CCC and WPA became the next priority job. Some of its displays were previewed at the International Petroleum Exposition in Tulsa before being installed at the park in June 1940. Exhibits for the Loomis Memorial Museum at Lassen Volcanic National Park constituted the final big project before WPA funding ended. ECW technician Lorenzo Moffett, the sole remaining preparator, installed most

of them at the park in September 1941. The last project on which CCC enrollees worked before their program ended that summer consisted of models for La Purisima Mission State Historical Park, California. Interspersed with these more urgent assignments the laboratories prepared exhibits for the highly regarded Fall River Pass museum in Rocky Mountain National Park and the Colorado River Station in Grand Canyon, a museum for Bandelier National Monument, and temporary museums at Ohanapecosh and Yakima Park, Mount Rainier.⁷⁸

While all this work progressed, Yeager wrestled with growing threats to continued productivity. As in the East preparations for war took precedence. The western laboratories' emergency relief work force disappeared with the cutoff of the WPA projects in July and the CCC detachment in August 1941. Yeager, Moffett, and two clerical helpers had to inventory the large volume of equipment and supplies that remained and get everything moved out of the Emeryville shops to storage in two former CCC barracks at Strawberry Canyon. Various defense agencies accepted many items by transfer; the rest required a second move to storage space in the old San Francisco Mint, where it stayed until after the war. The Old Mint, which would find a later place in the Park Service museum program, also provided some work space. Moffett set up shop there before the end of August. Because the building had only direct current, he could not use power tools. After a fruitless wait he installed AC wiring himself and continued to work on unfinished exhibits until funds to pay his salary ran out in June 1942.

Yeager also worked hard on the transition, although a special assignment called him to Washington for two months in the fall of 1941. Upon his return he began a wartime arrangement whereby he spent half his days on museum matters at Hilgard Hall and half as acting regional naturalist in the San Francisco office of Region Four. He initiated a survey of museum needs in western parks as a basis for setting priorities when planning could resume.⁷⁹ This marked the end of his assignment in the Museum Division. For the remainder of his long Service career he was the western region's chief interpreter, a position in which he continued to support the museum program strongly.

The year 1940, with World War II already underway in Europe, provides a convenient benchmark for charting changes in Park Service museums. The museum survey noted above revealed an almost phenomenal quantitative growth during the Depression decade. A general memorandum that spring summarized parallel developments in museum policy and procedure, which had moved far toward truly professional standards. It stated authoritatively the primary responsibility of the Museum Division in the design and construction of all Service exhibits—those in museums, trailside exhibits and markers, and displays intended for fairs, conventions,

and meetings. By implication, at least, it included historic house museums within division oversight. It confirmed sound guidelines to define the proper scope of park museums and set accession policy accordingly. It prescribed the procedure for preparation and review of museum prospectuses and exhibit plans. For the first time it established a required system of museum accession and catalog records, although a rather loose one that retained older optional forms.⁸⁰ The Service's *Field Manual for Museums*, soon to be published, gave fuller treatment to all these matters and replaced Laurence Vail Coleman's manual as the standard reference for park museums on policy, procedures, and technique.

Two meetings in 1940 also shed light on the state of museum work in the parks. The Region One Historical Technicians Conference met in Richmond at the end of April. The recommendations of a committee headed by Ned Burns emphasized a shortcoming of most park museums: the lack of specimens. The committee urged the historians to collect material objects of interpretive value on a systematic, selective basis and to learn how to use them as interpretive tools. As a corollary Carl Russell advocated more attention to historical research and publication on artifacts. In November the Second Park Naturalists Conference convened at Grand Canyon National Park. Burns again stressed collections and also the need for complete museum records, more adequate housing for exhibits and collections, still better exhibits, and more studies of their effectiveness. He called for closer integration of museum developments into the total interpretive program and increased use of trailside exhibits. Yosemite park naturalist Matthew Beatty presented a statistical analysis that showed exhibits accounting for more than half the total interpretive contacts in the parks, far in excess of the guided field trips that consumed most of the interpreters' time.⁸¹

By 1940 museums had become a major factor in helping visitors enjoy the parks. Professional leadership was pinpointing the aspects of museum management and development most in need of strengthening.

The Wartime Museum Program

World War II upset the normal course of museum work in the Park Service for about five years. The war not only forced strict limitations on manpower and money, it set tasks. At the same time, what the decimated Museum Division and the undermanned park museums were called upon to do as part of the war effort fitted precisely the continuing responsibility of the Service for the resources in its care.

In February 1941 Waldo Leland initiated action to guard the nation's cultural heritage from the growing threat of war. On behalf of the National Resources Planning Board he assembled representatives of such agencies as

the National Park Service, the Smithsonian Institution, the Library of Congress, and the National Archives. They organized a Committee on the Conservation of Cultural Resources with modest funding from the board. The committee set quietly to work on measures aimed to protect important collections from potential enemy attack. They identified remote places where especially valuable collections might be moved for safer storage. They encouraged their institutions and probably others to select in advance which treasures to evacuate. They compiled advice on packing and shipping and on protecting collections left behind. Ned Burns had particular responsibility for recommending methods appropriate for historic objects. He and Ronald Lee helped draft for the committee a manual on protecting cultural resources against the hazards of war. A supplementary handbook compiled by Hans Huth described practices that had given some protection to European collections and historic structures during early years of the war.⁸²

The committee's work led to the evacuation of important national treasures to safe hiding places. Some, especially from the Smithsonian collections, went to a maintenance building in Shenandoah National Park. As part of this process the Park Service in June launched an inventory of the "historical, scientific, and art objects which are regarded as irreplaceable or unusually valuable and, therefore, worthy of special attention in case of a national emergency." The lists, called for by the Advisory Board on National Parks, Historic Sites, Buildings, and Monuments (of which Leland was a member), went to Burns for compilation. He verified returns by visiting most of the vulnerable eastern coastal parks. Shortly after the Pearl Harbor attack brought the United States fully into the conflict, Burns, William Macy, and Rudolf Bauss hastened to pack key items from the Lincoln Museum collection for transport to safety. By January 1942 instructions went out to Colonial National Historical Park, Fort McHenry, Fort Pulaski, Castillo de San Marcos, and Statue of Liberty national monuments, and Boulder Dam National Recreation Area to pack listed specimens for evacuation.⁸³

As the progress of the war lessened the danger of enemy air raids, park museums faced a different hazard foreseen by Burns at the American Association of Museums meeting in May 1942. There he warned against letting patriotic enthusiasm in response to campaigns for scrap metal and paper overcome good curatorial judgment. Curators should be careful to sort out and retain irreplaceable objects and records of historical or artistic significance, he declared. A few months later the Service came under pressure to turn in for scrap all the bronze cannon, statues, and tablets in the parks. In response, it staunchly maintained its obligation to preserve these artifacts for future generations.⁸⁴ The crisis passed within a few

months, and Director Newton B. Drury, who bore the brunt of the pressure, saw his firm stand vindicated.

Foreseeing the economic and related problems that would face the United States when industry shifted from war production to business-as-usual, the Roosevelt administration requested federal agencies to prepare proposals for a postwar public works program. The Park Service responded to this initiative by concentrating much of the effort of its reduced staff on projecting park needs. The first result, an advance survey and planning program, was submitted in December 1943. During the next year and a half the Service refined not only its proposals and estimates, but also its procedures. A memorandum signed by the acting director in June 1945 ordered parks to seek development funding only with project construction proposals, which superintendents were responsible for preparing. Thanks to Burns the memorandum required "proposals for museum buildings [to] include estimates for equipment, such as cases, special lighting devices, etc., and preparation and installation of exhibits."⁸⁵

In late 1942 and 1943 Burns and Yeager energetically gathered and checked data for the advance survey. Information from all project proposals involving museum work was transcribed onto index cards, and the two developed a "price list" of exhibit preparation costs. Lyle Bennett, associate regional architect in Santa Fe, produced a useful "Checklist for Museum Planning." By the end of the war the Service had a long priority list of needed construction projects based on approved proposals and careful cost estimates. The list included a fair share of museums. When the first trickle of construction money became available in the 1946 fiscal year, Burns lost no time in getting work started on the backlog of museum planning.⁸⁶

Another phase of the wartime museum program started first and lasted longest. In October 1940 the Advisory Board on National Parks recorded its belief that both the historical and scenic parks had an important role "in promoting patriotism, in maintaining morale and understanding of the fundamental principles of American democracy, and in inspiring love of our country." It recommended that the Service expand its interpretive efforts, including those involving park museums. Carl Russell carried this message to the Second Park Naturalists Conference a few weeks later. Burns spoke along similar lines at the American Association of Museums meeting in May 1941 and Russell again made the point at the 1942 AAM meeting. The Service's interpretive program nevertheless suffered severe cuts in manpower and funding. Much of the load fell on park museums, which with minimum staffing could still present the objects and ideas the parks were created to preserve. The situation at Yosemite was perhaps typical; practically all the naturalist activities were eliminated, but the park museum remained open throughout the war.⁸⁷

Some strategically located parks maintained more active programs. Castillo de San Marcos in St. Augustine, Florida, installed temporary displays appropriate to the nearby Coast Artillery School. At the Statue of Liberty, the Washington Monument, and the Lincoln Museum at Ford's Theatre, park staff also prepared timely short-term exhibits. Several of the battlefield parks used their still-inadequate museums to supplement training exercises conducted from neighboring military bases. The newly installed temporary museum at the Jefferson National Expansion Memorial aimed its wartime efforts toward the civilian population of St. Louis. It provided a center for a changing series of special exhibitions, a structured program of field trips for local schools and youth groups, illustrated historical talks, and walking or streetcar tours to historic sites in or near the city.⁸⁸

The price park museums paid to remain open and active while undermanned corresponded to that paid by the parks as a whole. Collections languished from lack of curatorial attention and exhibits deteriorated in the absence of adequate maintenance. At the same time, the wartime museum program earned stronger support for the future by establishing a fuller understanding of the needs and potential of museums in the parks.

NOTES

1. Letters, Russell to Betty Russell, Apr. 21, May 13, 1935, Richard W. Russell Personal Files.
2. Letters, Russell to Betty Russell, Jan. 17, Apr. 14, July 6, 1935, *ibid.*
3. Russell referred to the museum division in organization charts and in correspondence to applicants during March and April, if not earlier.
4. Letters, Russell to Betty Russell, Jan. 20, 23, 25, 26, 1935, Richard W. Russell Personal Files; Carl P. Russell Diary, Jan. 19-29, 1935, *ibid.*
5. Russell Diary, Feb. 6, 7, 1935; letters, Russell to Betty Russell, Feb. 8, 18, Mar. 21, Apr. 22, June 10, July 27, Sept. 7, 1935.
6. Letters, Russell to Betty Russell, Feb. 8, Aug. 14, 1935.
7. Competition in case bidding followed the entry of the Michaels Art Bronze Company into the product field.
8. Russell Diary, Feb. 4, 5, 11, 12, 16, 18-20, 21, 1935; letters, Russell to Betty Russell, Jan. 29, Feb. 5, 15, 23, 24, 1935.
9. Letters, Russell to Betty Russell, Mar. 8, 9, 14, 17, 19, 21, 30, Apr. 1, 11, 17, 28, May 24, Aug. 6, 1935.
10. Letter, Russell to Betty Russell, Aug. 6, 1935; letter, Ned J. Burns to Director, Mar. 19, 1937, in Fort McHenry "Gun Museum" exhibitplan, Fort McHenry box, NPS History Collection.

11. Memorandum, Russell to Harold C. Bryant, Apr. 11, 1935, 1935 Museums (73-98) folder, Annual Reports, Branch of Interpretation box, NPS History Collection; letters, Russell to Betty Russell, Jan. 29, Mar. 4, 14, 21, Apr. 5, 7, 1935.
12. Letters, Russell to Betty Russell, Mar. 27, Apr. 7, 9, 11, 12, 14, 16, 20, 1935.
13. Memorandum, Demaray to Museum Curators and Museum Assistants Assigned to Eastern Park Projects, Apr. 10, 1935, Museum Policy binder, R3238, NPS History Collection.
14. Ralph Henry Gabriel, ed., *The Pageant of America* (New Haven: Yale University Press, 1925-29); Francis Trevelyan Miller, ed., *The Photographic History of the Civil War* (New York: Review of Reviews Co., 1911).
15. Ralph H. Lewis, "The Vicksburg National Military Park Museum," *Museum News* 14, no. 19 (Apr. 1, 1937): 8.
16. Disher, a graduate of Pomona College, had worked at the Wayside Museum in Grand Canyon National Park and the Museum of Northern Arizona before undertaking graduate study in anthropology at Harvard, which included field work for the Peabody Museum of Archaeology and Ethnology. Everard was a Yale graduate whose father's position with the American Association of Museums as editor of *Museum News* augmented his familiarity with museum work. Stevens, who had graduated from the University of Chicago and begun a life-long interest in American Indians, was the son of Thomas Wood Stevens, prominent in the dramatic arts field. Starrett had majored in botany at the University of Pittsburgh under O. E. Jennings, who was also curator of botany and head of the education staff at the Carnegie Museum of Natural History. A Dartmouth graduate and one of Clark Wissler's students at Yale and Columbia, Ewers had conducted research at the American Museum of Natural History where Wissler was the curator-in-chief of anthropology. Lewis had taken Foyles' museum methods courses at the University of Rochester and worked part time in the university's natural history museum before undertaking graduate studies in entomology. Titiev had just earned a Ph.D. in anthropology at Harvard and was well acquainted with museum methods as practiced at the Peabody Museum. Memorandum, Russell to Harold C. Bryant, Apr. 11, 1935, 1935 Museums (73-98) folder, Annual Reports, Branch of Interpretation box, NPS History Collection; Carl P. Russell, "Museum Studies Made by the Eastern Museum Division, April to July 1935," *ibid.*; *Park Service Bulletin* 5, no. 4 (May-June 1935): 28, and 8, no. 1 (January-February 1938): 38.
17. Russell, "Museum Studies Made by the Eastern Museum Division"; letters, Russell to Betty Russell, June 19, 24, July 23, 1935; letter, Russell to Ralph H. Lewis, July 11, 1935, Hot Springs National Park box, NPS History Collection; Vernon G. Setser, "Exhibit Plan, Historical Museum, Morristown National Historical Park," Morristown National Historical Park box, *ibid.*
18. Memorandum, Russell to Harold C. Bryant, Apr. 11, 1935, 1935 Museums (73-98) folder, Annual Reports, Branch of Interpretation box, NPS History Collection; letters, Russell to Betty Russell, Apr. 16, 17, 1935; letter, Vernon G. Setser to Elbert Cox, May 29, 1935, in "Exhibit Plan, Historical Museum, Morristown National Historical Park."
19. Letter, Setser to Cox, May 29, 1935; letters, Russell to Betty Russell, Apr. 17, 18, 1935.
20. Letters, Russell to Betty Russell, Feb. 11, 12, Mar. 4, 24, 27, Apr. 2, 12, 16, 20, 26, May 4, 7, June 1, 4, 6, 10, Aug. 4, 6, 14, 1935; *Park Service Bulletin* 5, no. 7 (September 1935): 27.

21. Letter, Russell to Betty Russell, Feb. 23, 1935.
22. Ralph H. Lewis, "Ned J. Burns, Educator, Naturalist, and Museum Expert," *Proceedings of the Stolen Island Institute of Arts and Sciences* 16, no. 2 (Fall 1954): 61-74.
23. Thomas C. Vint, "Report on the Building Program from Allotments of the Public Works Administration, 1933-1937, Western Division, National Park Service," NPS History Collection.
24. Ibid.
25. Letters, Russell to Betty Russell, Jan. 18, Feb. 9, 11, 1935.
26. Letters, Russell to Betty Russell, June 6, 10, 1935. The Ocmulgee National Monument museum building, whose construction was interrupted by World War II, affords a good example of curator-architect collaboration.
27. Museum Policy binder, NPS History Collection.
28. Letter to Betty Russell, Apr. 23, 1935.
29. Letters, Russell to Betty Russell, May 1, 24, July 6, 10, 1935.
30. Russell, "Museum Studies Made by the Eastern Museum Division, Exhibit Plans for Interior Museum," 1935 Museums folder, Annual Reports, Branch of Interpretation box, NPS History Collection; letters, Russell to Betty Russell, Aug. 4, 6, 1935.
31. Museum Division monthly report, March 1938, Monthly Reports, Museum Division 1936-39 box, NPS History Collection; Burns, "The History of Dioramas," *Museum News* 17, no. 16 (Feb. 15, 1940): 8-12.
32. Report of the Morristown Field Laboratory for December 1935, Monthly Reports, Museum Division 1936-39 box, NPS History Collection.
33. After World War II Van Cott became principally responsible, with William C. Macy, for the exhibition program of the Armed Forces Institute of Pathology and Medical Museum. Warthen brought to his painting experience that included service in a Texas penal road gang, the police having seized him as a vagrant early in the Depression. Jansson was a second-generation designer for Steuben Glass. Urban, a fine craftsman, had flown private airplanes before a serious illness. When Jackson died at the age of 99 in 1942, Ned Burns, John Doerr, and Victor Cahalane of the Park Service met the train that brought his body to Washington and attended the burial in Arlington National Cemetery.
34. Monthly Reports, Museum Division 1936-39 box, NPS History Collection.
35. Letters, Russell to Betty Russell, Aug. 23, Sept. 1, 3, 1935.
36. Memorandum, Russell to Harold C. Bryant, Hillory A. Tolson, and Verne E. Chatelain, Jan. 14, 1936, 1936 Museums folder, Annual Reports, Branch of Interpretation box, NPS History Collection; memorandum, Tolson to Russell, Jan. 15, 1936, *ibid.*

37. Letter, Russell to Ansel Hall, Jan. 15, 1936, *ibid.*; memorandum, Kenneth B. Disher to Conrad L. Wirth, Mar. 15, 1936, *ibid.*; memorandum, Russell to Wirth, May 9, 1936, *ibid.*
38. *Park Service Bulletin* 6, no. 7 (August 1936): 26; letter, Russell to Fryxell, May 19, 1936, 1936 Museums folder, Annual Reports, Branch of Interpretation box, NPS History Collection; memorandum, Russell to Burns, June 16, 1936, *ibid.*
39. In 1938 the Branch of Research and Education became the Branch of Research and Information. "Education" sometimes encountered a hostile response in Congress. When "Information" also proved unsatisfactory, "Interpretation" replaced it in October 1940. Concurrent with the 1938 change, branch chiefs became supervisors instead of assistant directors.
40. *Museum News* 14, no. 16 (Feb. 15, 1937): 1, 4; *ibid.* no. 19 (Apr. 1, 1937): 1; *ibid.* no. 20 (Apr. 15, 1937): 1; *ibid.* 15, no. 4 (June 15, 1937): 1; *ibid.* 15, no. 9 (Nov. 1, 1937): 5; *ibid.* 15, no. 18 (Mar. 15, 1938): 1; *ibid.* 16, no. 12 (Dec. 15, 1938): 7-8; *Park Service Bulletin* 7, no. 2 (March 1937): 16-17; *ibid.* no. 4 (April/May 1937): 24; *ibid.* no. 7 (August 1937): 9; Monthly Reports, Museum Division 1936-39 box, NPS History Collection.
41. Park Service procurement officer Roger Rittase appreciated the need for exceptions to standard practice, for he was himself a competent artist painting as a hobby.
42. A director's memorandum to all field offices of October 21, 1936, focused exhibit preparation and revision in the Museum Division laboratories (Museum Policy binder, NPS History Collection).
43. See reports for eastern park museums, January and July 1937, in Monthly Reports, Museum Division 1936-39 box, NPS History Collection.
44. *Park Service Bulletin* 8, no. 8 (November/December 1938): 27; memorandum, Carl Russell to Ned Burns, June 16, 1936, 1936 Museums folder, Annual Reports, Branch of Interpretation box, NPS History Collection.
45. Museum Division monthly report, July 1937, Monthly Reports, Museum Division 1936-39 box, NPS History Collection.
46. Secretary's Order No. 1365, Mar. 27, 1939, Museum Policy binder, NPS History collection.
47. Museum Division monthly report, March 1938, Monthly Reports, Museum Division 1936-39 box, NPS History Collection.
48. Museum Division monthly report, October/November 1938, *ibid.* Both curators brought back much from their year of study. Having learned that an exhibit planner must maintain close contact with museum visitors, Lewis obtained permission to observe visitor behavior in the National Museum on weekends under the supervision of Frank Setzler, head curator of anthropology.
49. 1938 Museums folder, Annual Reports, Branch of Interpretation box, NPS History Collection.

50. Russell, "A Museum of the American Fur Trade, Proposed Feature of the Jefferson Memorial, St. Louis, Missouri: Prospectus and Tentative Exhibit Plan," Sept. 1, 1936, Jefferson National Expansion Memorial box, NPS History Collection; Peterson, "A Museum of American Architecture," *The Octagon* 8, no. 11 (November 1936): 3-7.
51. Museum Division monthly report, July 1941, Monthly Reports, Museum Division box, NPS History Collection.
52. Museum Division monthly report, May/June 1939, Monthly Reports, Museum Division, 1936-39 box, NPS History Collection.
53. Museum Division monthly reports, February 1941, June 1942, Monthly Reports, Museum Division box, NPS History Collection. Buffmire's work on the Kings Mountain project foreshadowed his later important contribution to the Park Service museum program.
54. Hopkins, "Testing the Ferguson Rifle," *The Regional Review* 6, nos. 1 and 2 (January/February 1941): 32-33.
55. Museum Division monthly report, March 1940, Monthly Reports, Museum Division box, NPS History Collection.
56. Branch of Research and Information report, October-November 1938, *ibid.* Reportedly Ickes also remarked that he did not want to see any of "those damn Park Service uniforms" around the museum either.
57. Letter, Burns to Yeager, Feb. 26, 1937, 1937 Museums folder, Annual Reports, Branch of Interpretation box, NPS History Collection; "Book of Museum Procedure" in Exhibit History 1939-40 box, *ibid.*
58. Reports of Ford's Theatre and Western Museum laboratories for June-July 1940 and Museum Division for July 1940, Monthly Reports, Museum Division box, NPS History Collection. Partially in recognition of the manual's value, the Museums Association, London, designated Burns a fellow in 1952. In the mid-1960s the director of a leading provincial museum in Great Britain asked the writer for a personal copy, saying it had been the museological bible of his nurture.
59. Museum Survey of 1939-40 folder, Exhibit History 1939-40 box, NPS History Collection.
60. Branch of Research and Information report for October-November 1938, Monthly Reports, Museum Division 1936-39 box, NPS History Collection.
61. As an unfortunate side effect of the appointment, a jealous colleague accused Bauss of involvement in Nazi espionage. After a grueling investigation the FBI cleared him of all suspicion. The incident destroyed trust in his accuser.
62. Museum Division monthly report, May/June 1939, Monthly Reports, Museum Division 1936-39 box, NPS History Collection; report for June/July 1940, *ibid.*
63. Museum Division monthly reports, February-April and July 1941, February and July 1942, Monthly Reports, Museum Division box, NPS History Collection.

64. Museum Division monthly reports, September-December 1941 and January-March 1942, *ibid.* The staffing crisis underlined the close relationships that had developed between the Museum Division and the Branch of Historic Sites under Ronald Lee. When he learned of the situation, Lee made a historian's position available in St. Louis. Lewis thus went there as a historical technician rather than as a curator.
65. *Museum News* 20, no. 13 (Jan. 1, 1943): 1, 4, 5; *ibid.* 21, no. 14 (Jan. 15, 1944): 7-8.
66. "Summary of Activities, Field Division of Education, Berkeley, California, from July 1933 to March 1935," Annual Reports, Branch of Interpretation box, NPS History Collection.
67. *Ibid.* Russell also played a leading role in the western PWA projects, especially Moraine Park and Scotts Bluff, until his detail to Washington.
68. Letter, Russell to Hall, Jan. 18, 1936, 1936 Museums folder, *ibid.*
69. Ned J. Burns, *Field Manual for Museums* (Washington: National Park Service, 1941), pp. 15-17; Museum Division monthly reports, May-October 1939, Monthly Reports, Museum Division 1936-39 box, NPS History Collection.
70. Letters, Russell to Betty Russell, Aug. 23, Sept. 7, 1935; Monthly Reports, Museum Division box, NPS History Collection; Western Museum Lab Reports box, *ibid.* "I do not want a gang of several hundred louts on my hands," Russell wrote his wife. "I am not yet reconciled to dropping my standards to the point of taking on these relief workers."
71. *Park Service Bulletin* 7, no. 5 (June 1937): 8; *ibid.* no. 6 (July 1937), p. 9.
72. Monthly Reports, Museum Division box, NPS History Collection; Western Museum Lab Reports box, *ibid.* After all the labor that went into it, the bibliography elicited criticism from John Merriam.
73. *Ibid.*
74. *Ibid.*
75. "Miscellaneous Products Available to National Parks and Monuments from Western Museum Laboratories," WML, WPA Prop. Products Cat. box, NPS History Collection; memorandum, Yeager to All Field Offices, May 13, 1941, *ibid.*
76. Monthly Reports, Museum Division box, NPS History Collection; Western Museum Lab Reports box, *ibid.*
77. *Ibid.*
78. *Ibid.* See reports for August 1938, February, March, June, August, September, November 1939, January, March-September, November 1941.
79. Monthly Reports, Museum Division box, NPS History Collection.

80. Memorandum, Arno B. Cammerer to Washington and All Field Offices, Mar. 13, 1940, Museum Policy binder, NPS History Collection. The only previous formal instructions on museum record procedures seem to be those prepared for the Morristown museum in 1935; copy *ibid.*
81. "Recommendations of the Historical Technicians Conference, Region One, April 25-27, 1940," pp. 4-5, Interpreters' Conferences 1929-52 box, NPS History Collection; "Full Report of Committees, Historical Technicians Conference," p. 7, *ibid.*; "Minutes of the Historical Technicians Conference," pp. 9-10, *ibid.*; "Proceedings of the Second Park Naturalists Conference Held at Grand Canyon National Park, November 13-17, 1940," pp. 131-39, 145-49, 156-62, 228-36, 350-51, NPS History Collection.
82. Charles W. Porter III, ed., "National Park Service War Work, December 7, 1941, to June 30, 1944," p. 39, World War II, NPS, K5410 box, NPS History Collection. Huth, a refugee from Nazi Germany sponsored by the Carl Schurz Foundation, worked closely with the Branch of History during the war. As former curator of the Potsdam Palace collections, he brought the Service a far higher level of curatorial scholarship in the arts than it had known previously.
83. Memorandum, Arthur E. Demaray to All Field Offices, June 20, 1941, Museum Memos 1941 folder, Exhibit History 1941-59 box, NPS History Collection; Museum Division monthly reports, November and December 1941, January 1942, Monthly Reports, Museum Division box, *ibid.*
84. Burns, "Wartime Loss of Valuable Objects and Records through Misguided Salvage Efforts," *Museum News* 20, no. 16 (Feb. 15, 1943): 7-8; Porter, "National Park Service War Work," pp. 39-41.
85. Memorandum, Hillory A. Tolson to Director's Office and the Regional Directors, June 29, 1945, Project Construction Program-General folder, Unlabeled Museum Files box, NPS History Collection.
86. In January 1946, for example, Burns arranged Ralph Lewis's detail from Jefferson National Expansion Memorial to Great Smoky Mountains National Park to collaborate with park naturalist Arthur Stupka in preparing a museum prospectus.
87. "Proceedings of the Second Park Naturalists Conference," pp. 335-46, 359; Burns, "Park Museums and Public Morale," *Museum News* 19, no. 10 (Nov. 15, 1941): 11-12; "Practical Aspects of Park Museum Problems in Time of War," Exhibit History, 1941-59 box, NPS History Collection; Ralph H. Lewis, "Designing an Exhibit of American Democracy in a National Park," *Museum News* 21, no. 14 (Jan. 15, 1944): 7-8; Frank A. Kittredge, "Yosemite During the War Years," *Yosemite Nature Notes* 25, no. 5 (May 1946): 73-76.
88. Porter, "National Park Service War Work," pp. 31, 33-34; Jefferson National Expansion Memorial boxes, NPS History Collection.